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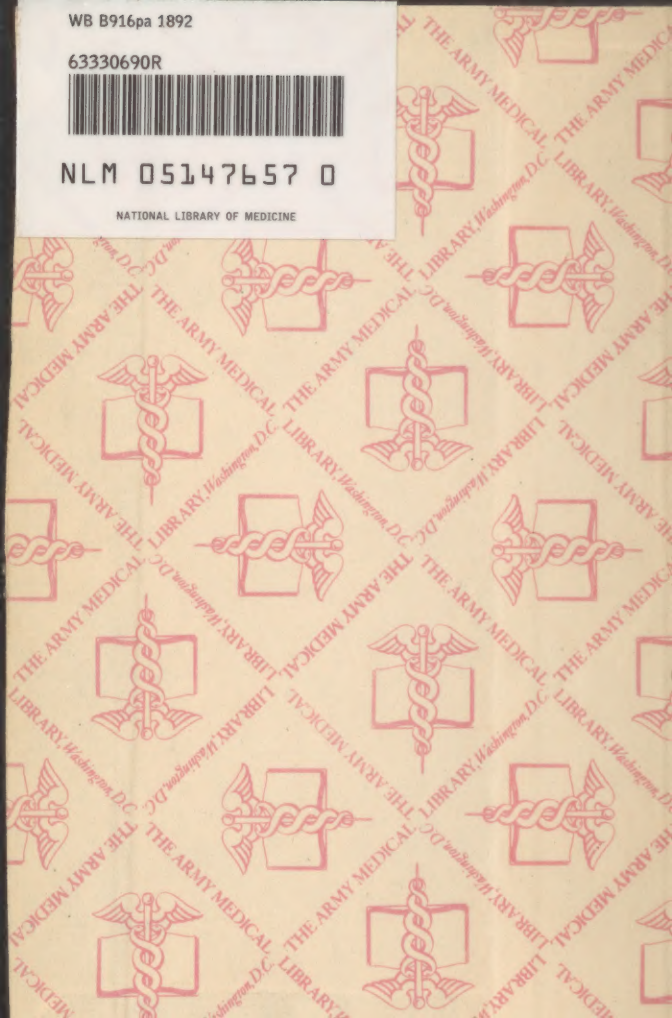
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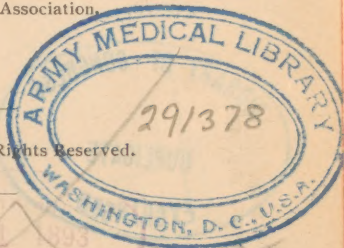
A COMPLETE AND CONDENSED WORK ON THE
PRACTICE OF MEDICINE FOR PHYSICIANS
AND STUDENTS.

BY

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PREFACE.

In the preparation of this little volume it has been our endeavour to give, in the most condensed form, a modern work on the Practice of Medicine, which will at the same time be full enough for all practical purposes and yet be of such size as to enable one to carry it in the coat pocket easily.

We have availed ourselves freely of the latest standard literature by the recognized authorities in the profession and have added our own personal experience thereto in the pages following. That the little book may prove of real service to the "rank and file" of the profession is the sincere wish of

THE AUTHOR.

BRYCE'S POCKET PRACTICE.

GENERAL INTRODUCTORY REMARKS.

In a condensed work on the Practice of Medicine, it is both impossible and unnecessary to go into lengthy details of the many theories of diseases and the supposed correct methods of treatment appropriate for the same. A work on practice should really be free from conflicting theories or uncertain advice of any kind. In the present book we propose to give our readers the results of our experience and observation in the best and surest methods of *curing sick people*, whether this observation agrees or not with the various popular theories of the day.

With this statement, which we trust will relieve us of any appearance of egotism, we shall give a brief outline of some of the general principles applicable in the treatment of the majority of diseases. Just where sickness begins and where health is departed from in slight cases is often a difficult matter to decide, but one of the most constant and unfailing signs of a departure from the normal standard of health is fever.

FEVER.

There is probably no actual departure from the normal standard of health which is not accompanied or even preceded by fever of more or less intensity. Therefore fever should be looked upon both as a valuable aid in detecting

the presence and advance of disease, and, in many instances, as a salutary effort of nature to rid the system of morbid products. It is therefore important for the practitioner to study the general characteristics of fever as they appear in common in all complaints. With this general knowledge a case need not go along untreated while waiting to make out a diagnosis, which, after all may never be reached. Fever indicates at all times some departure from the normal equilibrium and can be recognized by certain well marked symptoms in all cases. The most prominent symptoms of fever are abnormal heat, acceleration of circulation and respiration, diminution of secretion, and a feeling of general uneasiness or *malaise*, as the French people call it. Now while we should regard all fevers as salutary efforts, we should not lose sight of the fact that, beyond certain limits, these febrile disturbances are the most serious and dangerous conditions that could possibly surround a patient. It will be seen, therefore, that there are certain indications for treatment in these fevers, whether they be specific or symptomatic, and oftentimes we can, by a prompt treatment of these symptoms in themselves, cut short further pathological developments. We mention this for the sake of those who have been taught not to treat symptoms. While a correct diagnosis is a most important matter yet we have been compelled to treat many cases of sickness from time to time during quite an extended period in which we could not make a satisfactory diagnosis, and indeed we had no need of a diagnosis. The careful and observing physician cares but little what name he gives his case provided he can abate and regulate the various disturbing symptoms as they arise.

As we have said, therefore, there are general lines of treatment to be adopted in all fevers and applicable to

all fevers. For example, we endeavor to reduce the temperature to the normal, to regulate the secretions, restore the circulation to its equilibrium, and favor the action of the skin and secretory organs. We reduce the temperature by refrigerant drinks, diaphoretics, the various antipyretics, cold sponging, baths, quinine, salicin, etc. We find the circulation brought nearer the normal standard by alcohol, ammonia, prussic acid, digitalis, veratrum viride, antimony, venesection, etc. When the temperature reaches the normal grade by these measures, the secretions will be found to have been properly re-established. Most fevers are due to special causes or special poisons, though, we undoubtedly have many forms of fever which are purely irritative and dependent upon other disturbances within the system. Other special general fevers will be considered further on in this work under the appropriate headings, though, at this point, we will mention the various malarial fevers, typhoid and special eruptive fevers, all of them, nevertheless, requiring the general essential treatment we have outlined.

INFLAMMATION.—Of equal importance with fever, will be found the general different inflammations which affect in a similar manner, more or less, all of the organs and tissues of the body, constituting, according to anatomical relations and cellular structure the different diseases in the different organs, resulting in various pathological changes and local destruction of parts. Inflammation may result as a sequel of local or general disturbances, direct mechanical injuries, irritating poisons, or depressed or impoverished conditions of the blood itself.

Inflammation again is generally recognized by some of the more prominent symptoms of fever. For example, the old description of heat, pain, redness and swelling, apply very well indeed at the present time to what may

be observed in ordinary inflammatory conditions. We have at first dilatation of the blood vessels and commencing congestion, followed by stasis or stopping of the circulation, with a loss of the special functions of the blood globules extravasation and exudation in the surrounding cellular tissues, thus giving us swelling—pressure upon the sensitive nerves, causing pain—and death of the part from rapid disintegration. Such phenomena as these going on at any local point in the system will certainly be announced by general or symptomatic fever.

We do not propose to give a full treatise on the subject of inflammation, but a few leading points, which will serve the practitioner or student in the general treatment of all cases. We will say, for the general treatment of inflammation, the effort should be to do as we have done in fevers; reduce the temperature, calm the turbulent circulation, and restore the secretions. Wherever we can find the local point giving this trouble, we should adopt in addition to the regular treatment also local treatment to the parts on the same general principles that we have outlined, namely, local depletion by means of cups, leeches, scarification, hot or cooling lotions, etc., etc. All special inflammations will be treated of further on, as they will occur in the various individual diseases, and we will reserve only this to be said in reference to them, that the practitioner may not be surprised at peculiar results in special inflammatory conditions of certain tissues. For example, in parenchymatous or glandular structures, the tendency is for inflammation to be intense and rapidly run on into the formation of pus and death of the parts. In serous tissues, we have of course a greater tendency to the production of plastic lymph and serum which quickly become organized, forming dangerous bands here and there, limiting action and usefulness of the parts

or forming pus, and when we take into consideration each special tissue, we may expect some peculiar tendency under inflammatory conditions according to its own anatomical structure and functions.

BACTERIOLOGICAL PATHOGENESIS.—Before going into the consideration of the various diseases, we will call attention to the subject of bacterial influence in the production of disease. For some years past this has been one of the most severely ridden hobbies that has been before the profession for a long time. We have been informed ever and anon of the discovery of this or that microbe, until now we have the claim made by enthusiastic workers that the specific microbe or germ of nearly every disease has been discovered. The outcome of all this agitation has been to divert much thought from the actual causes of disease and their correct management. Proceeding upon the presumption that the principal line of treatment was to annihilate the various bacilli by means of antiseptics and germicides, other and more important measures have been neglected or overlooked by the enthusiast. Indeed, it is highly probable that much harm has been done both in surgery and midwifery as well as in general practice by the reckless use of the so-called germicides.

But we will not trespass upon our space in simple conjecture. We will introduce the conclusions of one of the ablest observers and experimenters in this or any other section of our country, on the subject of the bacterial cause of disease. Dr. L. B. Anderson, of Norfolk, Virginia, in the *Southern Clinic* for August, 1886, after detailing the results of a long series of laboratory and microscopic investigations, and after a very ample study of various cultures of these germs reaches the following conclusions :

" If then they cannot live in healthy tissue, (and this he proves) they can only have a name and a being in diseased tissues. If they only find a nidus and a home and nutriment in diseased tissue, how can they produce disease in a locality in which they cannot live? If, therefore, bacteria are only in diseased tissue, their presence, with reference to the disease can only be said to be *post hoc*; while the disease by no logical deduction whatever, with reference to them, can be said to be *propter hoc*."

As far as we know at the present time there is not the slightest proof of the capability of these bacilli to generate disease in the system, and their presence in certain diseased tissues only argues their ability to live in suitable soil. If the ground taken by the advocates of the germ theory of disease was true, according to their own claims, there should not be a single living human being upon the face of the earth today. We do not pretend to say that the system may not be impressed and that disease may not be induced by morbid agents of all kinds, including micro-organisms occasionally; but the statement that the majority of diseases are induced by the action of certain specific micro-organisms capable of generating certain specific diseases, is both absurd and untrue, and calculated to do violence to far more rational and better established laws of pathology. *

GENERAL TERMS IN SYMPTOMATOLOGY.

THE INCUBATION PERIOD is the time between exposure to a disease and the manifestation of the first symptoms.

THE PRODROMIC PERIOD is the time of early development of a disease.

OBJECTIVE SYMPTOMS are such as are apparent to the observer.

SUBJECTIVE SYMPTOMS are those complained of by the patient.

AETIOLOGY is a study of the causes producing diseases.

AN INFECTIOUS DISEASE is supposed to be due to the introduction of a disease germ into the system from without, but not capable of reproduction in the body and not communicable to another individual.

A CONTAGIOUS DISEASE is due to a specific cause and capable of being transmitted to others.

A SPORADIC DISEASE is one occurring in isolated cases.

AN ENDEMIC is where many cases occur in a limited locality.

AN EPIDEMIC is where a disease spreads over a wide territory.

THE PULSE in an adult should normally average 65° to 75° per minute, in infants it should be from 110° to 130° , in old age about 60° . The pulse may be very rapid in low fevers, anemia, great debility, etc., or very slow in brain injuries, effusion, and cardiac muscular failure. It may be small, hard and wiry in inflammations of the peritoneum and other serous membranes.

THE TONGUE in health is small, smooth, slightly coated in the morning at times and pleasantly moist. It is denuded of epithelium in scarlet fever, dysentery, some gastric conditions, occasionally in pneumonia, and a few other conditions. It is dry in various acute diseases, coma, and in diabetes. It is extremely red in gastro-enteric irritation, and this is especially noticeable at the tip. When it is glazed, smooth, and glossy with prominent papillae, it indicates great prostration.

TEMPERATURE.—The normal temperature of the human

body is 98° F. Children have normally a higher temperature than adults (about one or two degrees). A temperature continued above 98.5° indicates prostration and illness; 101° to 105° , severe fever; 105° to 108° , great danger; 108° to 109° , impending death. A temperature of 105° or 106° on first day of illness indicates ephemeral or malarious fever; certainly *not* typhoid. In typhoid fever, an evening temperature of 103.5° indicates a mild course; 105° in the evening or 104° in the morning, in the third week indicates danger. An uniform temperature from morning until evening is favorable. A high temperature from evening until morning is unfavorable. A falling temperature from evening until morning is favorable. A rising temperature from evening until morning is dangerous.

FEVER DIET consists in giving the patient light, cooling and easily digested food every two or three hours, day and night. The best food of this character is milk, soups, broths, arrowroot, buttermilk, etc.

FEVER TREATMENT consists in giving refrigerant drinks, cold sponging, the various antipyretics, sedatives, diaphoretics, etc. The patient should be kept in a quiet, darkened and well ventilated apartment and guarded against all noises and other disturbing causes.

SIMPLE CONTINUED FEVER—Febricula.

The simplest form of continued fever may be seen in the ephemeral fever of over fatigue, exposure, mental worry, and want of food sometimes. It may last from one to six or seven days and can be traced to no special pathological lesion.

SYMPTOMS.—Chill, followed by sudden rise of temperature, which may reach 104° in a few hours. This high

temperature subsides speedily in from a few hours to a few days at most. There is usually headache, disordered digestion, some pains in limbs, thirst, coated tongue, and constipation.

PROGNOSIS.—Always ends in recovery, usually by crisis. We have a copious perspiration, abundant flow of urine, and a general restoration of secretions.

TREATMENT.—Quiet rest in bed, light unstimulating diet of milk, broths, cooling acidulated drinks, and some gentle aperient, usually some of the mild salines. Spirits nitre, or liq. ammon. acet., may be given in iced water. As the fever leaves the patient tonic doses of quinine and dilute muriatic acid may be given for a while.

TYPHOID FEVER—Enteric Fever, Abdominal Typhus.

This is the typical and most serious form of the continued fevers, excepting true typhus, which is seldom seen in this country.

SYMPTOMS AND GENERAL CHARACTERISTICS.—This disease is peculiar in its slow onset, its marked debility, diarrhoeal tendency, and temperature record. The prodromal period lasts from three or four days to as many weeks; is characterized by chilliness, general malaise, feverishness towards night, loss of appetite, great debility, probably some diarrhoea, and occasionally epistaxis. In the *first week* of actual development of fever, we have the fever continuous, with a gradual ascent from 99° up about one degree every evening until within six or seven days the temperature will have reached its height, 103° – 105° . During this continued rise we find a morning decline of about one degree less than it was the previous evening. After the maximum temperature has been

reached it remains almost stationary with a slight morning remission and evening exacerbation until the thirteenth or fourteenth day, when it, in favorable cases, begins to decline behaving *vice versa* in its descent as it did in its ascent until from the twenty-first to the twenty-fifth day the evening temperature reaches the normal. During this first week we have usually diarrhœa, if not present before; anorexia, lassitude, headache, soft compressible pulse, and frequently delirium at night. In the *second week* from the above temperature record we may look for increase of all of the symptoms, higher fever, stupor, hallucinations, dry tongue, the diarrhœa of thin pea-soup offensive stools continues, with tympanitic distention. About this time we may look for a slight eruption of rose colored spots about on the thighs, abdomen or chest; they are seldom seen on the face. These spots quickly disappear under pressure, but return again. They are scattered, seldom showing over twenty or thirty on the whole body. They are by no means constant and should not be considered necessary diagnostic points. In the *third week* in favorable cases all of the symptoms begin to subside and the patient commences to improve. In unfavorable cases we have a deepening of the stupor, excessive diarrhœa, rapid exhaustion and death from this cause or some complication.

About the middle of the *fourth week* the temperature should be normal and the patient convalescing.

The immediate *cause* of this disease is not fully understood, but it is reasonable to suppose from all of the evidence that it may be due to several methods of introduction of poisonous material into the general circulation. The use of drinking water contaminated with dejecta from typhoid patients, diseased milk and similar circumstances have all been considered causative of the disease.

We believe many cases originate from pure debility and over work, and that the general system becomes poisoned from slow absorption of morbid matter in the intestinal tract.

The chief pathological or anatomical lesions found are in the glands of the small intestines. Peyer's patches and the solitary glands seem to swell and become elevated several lines during the first ten days, then they inflame, ulceration occurs, and sometimes perforation of one or all of the coats of the bowel may follow, causing fatal hemorrhage or peritonitis. This ulceration continues from this time on to the twentieth or twenty-fifth day, after which cicatrization takes place. The mesenteric glands are always involved and the spleen is found soft and enlarged in typhoid fever. Associated with these symptoms we may have bronchial cough, hypostatic pneumonia, nervous troubles and kindred affections resulting from this condition of profound systemic poisoning.

THE DIAGNOSIS is plain from the detailed symptoms given, and possibly the only confusing diseases would be prolonged febricula, mild typhus, or some malarial complications. The rapid rise of temperature, periodicity, sudden onset, intermission, etc., will settle the matter in favor of malarial trouble; while previous history, apparent cause, and temperature will help out in favor of febricula. The average mortality is from twenty to twenty-five per cent.

Recent writers, advocates of the forcible reduction of temperature by the cold bath, claim a still further reduction of the mortality rate. The disease is most prevalent from the ages of fifteen to thirty years. It seldom appears in children under ten or in persons over fifty.

PROGNOSIS will depend upon the age, severity of symptoms, previous condition and general surroundings of the patient, and may be made out from the outlines given above. We have to take into consideration, however, possible complications in shape of pneumonia, brain disease, heart failure, and perforation of the bowel.

TREATMENT.—It will be apparent to our readers that this disease must run a definite course uninfluenced by any remedies intended to jugulate or abbreviate it. Let us therefore impress you that here, of all other cases, you must not give a single dose of medicine unless it is indicated. The greatest possible good can only come to the patient by placing him in the most favorable circumstances to conserve his vital powers and enable him to hold up and let the disease run its course. Of course drugs and food are necessary, and, properly used, will be of great avail in the prolonged struggle with which all typhoid fever patients must contend; but here good judgment must prevail. The system must be *aided* in eliminating the morbid agents, and not *obstructed* with unnecessary drugs or food.

The patient should be placed on a moderately firm cool mattress, and in a cool, quiet, well ventilated room. The skin should be gently sponged and cleansed with tepid water or cold water containing some bread soda, whisky and vinegar. Remember, a patient in favorable cases may go through an entire attack without one single dose of physic; and now with this final injunction we will outline the special indications for drugs.

First in importance is food. This should be an easily digested liquid or semi-liquid usually. Good pure milk is the best throughout; then in addition, beef tea, essence, and juice, thickened with arrowroot or burnt flour, milk custards, milk and eggs, milk toast, etc. Liquids such as

coffee, tea, toast water, apple water, etc., may be given freely. If the condition of the bowels will permit it, grapes without skin or seeds, orange juice, raspberry vinegar, etc., may be given with no sugar, or very little. The inside of well baked acid apples, cold, are very much relished and are serviceable. A patient must be fed regularly by day and night, and if they are listless and make no call for their food they should be aroused and made to take milk, soup, or stimulants every three hours. As long as the pulse and heart hold up well, stimulants may be withheld, but usually they will be demanded in the second week. If prostration is marked, the pulse weak and compressible, skin moist and cool, respiration fatigued, the time has come for immediate and continued systematic stimulation, whether it be the first day or the third week of the disease. Good pure whisky or brandy are to be relied upon chiefly, and they may be given as juleps, or with plain water and ice, or in milk punches, egg-nogs, etc. Port wine and pure blackberry wine come in as auxiliaries between the stronger stimulants. They both stimulate, feed and check hæmorrhagic tendencies. The mineral acids well diluted are valuable as refrigerants and styptics.

Quinine is positively harmful. Cathartics must be avoided. If the bowels are constipated a gentle laxative of calomel and ipecac guarded with Dover's powder should be administered in the early stages of the disease. Moderate diarrhœa should not be checked, but if it becomes profuse, over four or five stools a day, it should be held in check with Dover's powder, opium, bismuth, acetate of lead, used singly or in combination.

For excessive tympanites, as well as for the dry, glazed tongue, turpentine emulsion internally and turpentine stupes are invaluable. This will be found a most admirable stimulant and anti-ferment also. For epistaxis or

other hæmorrhages turpentine is most excellent, and we would especially recommend in these hæmorrhages the free use of ergotole in doses of twenty drops every two hours. Lime water with milk and ice, drop doses of laudanum, or champagne will often relieve the gastric disorder. Frozen cream without egg or sugar is of great service also in the stomach disorder of typhoid.

For restlessness and sleeplessness we have opium, chloral, morphia, potass. bromid., hyoscyamus, chloral-amide 30 to 45 grains. The weak heart must be sustained with brandy, strychnine, strophanthus, nitroglycerine. To disinfect the stools use copperas water, lime water or solution of corros. sublimate.

About the latest agitation in the way of new treatment is the plan of giving the patient a cold bath as advocated by Brand and practised extensively in Germany. They immerse the patient in a cold bath of 68° F. for fifteen minutes every three hours, day and night, as long as the rectal temperature shows over 102°. An immense reduction in the death rate is claimed by the advocates of this plan of treatment. We prefer cold sponging.

TYPHUS FEVER—Ship Fever, Jail Fever.

In general practice this is a rare disease, and considered somewhat allied to typhoid, though it is generally regarded as a distinct disease by the best authorities. It is evidently a blood disease, very contagious, and due to a special poison, the result of overcrowding, bad air and poor food.

SYMPTOMS.—After a period of twelve hours to as many days of incubation the disease is ushered in with chill, high fever and rapidly rising temperature. The thermometer will register 104° to 106° within the first three or

four days and may do so within the first twenty-four hours. There is no morning remission until the fifth or sixth day which continues until a very decided remission occurs about the tenth day, but the temperature again rises and continues high until about the fourteenth day when it falls rapidly to, or below, the normal. There is constipation. On the fifth day an eruption of measly blotches occurs all over the body, but does not appear on the face. This eruption gradually deepens to a dull, dusky, purplish hue, and becomes petechial frequently. All of the grave nervous symptoms seen in typhoid are observed in this disease, intensified in the form of fierce delirium, headache, stupor, etc.

DIAGNOSIS.—By contrasting the sudden onset, eruption, rapidly reached high temperature, and absence of tendency to diarrhoea, we can distinguish typhus from typhoid which it somewhat resembles.

Mortality is about twenty-five per cent. and the prognosis is unfavorable when the pulse exceeds 120, the patient is of an advanced age, or where there is overcrowding or the system has become profoundly poisoned. There are no distinct anatomical morbid lesions, and this may be truly designated essentially a blood disease.

TREATMENT.—The patient should be placed in a well ventilated apartment, isolated, and all of his dejecta, clothing, etc., disinfected. The bowels should be regulated with calomel, colocynth, podophyllin, citrate of magnesia, salines, etc. The skin should be acted upon with nitre, ipecac, jaborandi, etc. The mineral acids have been found very useful. Quinine in small doses is of service, and its efficiency is increased by the addition of pulv. capsici. The system must be sustained with an abundance of liquid diet, broths, milk, and stimulants. For stupor,

weak heart and sleeplessness we must use leeches or blisters to back of neck, stimulants, opium, caffeine, digitalis, cocaine, etc. Complications must be looked for as in typhoid and treated as they arise.

CEREBRO-SPINAL FEVER—Cerebro-Spinal Meningitis, Spotted Fever.

This disease occurs as an epidemic usually during and following wars and along the routes of armies, caravans, etc. It is non-contagious, due to a specific poison and is quite malignant under certain circumstances. It affects primarily the meninges of the brain and spinal cord, has a period of incubation of from two days to one week. It is usually characterized by violent head symptoms, vertigo, photophobia, intense headache and eruption of a petechial character, stiffness and contraction of the muscles of back of neck and back, fever, delirium and general cerebral disturbances.

SYMPTOMS.—Commences with chill, followed by high fever, temperature 102° to 105° , violent headache, nausea, great rigidity of all post-cervical and dorsal muscles. In the *fulminating* form all of these symptoms burst upon the patient with startling rapidity and leave him with delirium or stupor; high fever, very high temperature 103° to 105° 6° 7° , rigid contraction of muscular system, etc. Milder cases are evidenced by slower approach and less pronounced symptoms.

COMPLICATIONS.—If the patient does not succumb to the immediate force of the disease, we have to run the chances of insanity, general or partial paralysis, deafness, blindness, epilepsy and other disturbances of the central nervous system. The mortality is very high in this form of trouble, ranging as high as sixty or seventy per cent. in certain epidemics.

TREATMENT.—Prompt purgation with calomel and subsequent small doses of same. Jaborandi for skin action, opium, potassium bromide, ergotole for brain congestion, cups, leeches and blisters to back of neck, shave head and blister or apply ice cap if necessary. Keep up patient's strength and attend to general conditions which favor quiet and freedom from excitement. As the intensity of the disease wears off support the patient's powers with tonics, good food, and quiet restful surroundings.

RELAPSING FEVER—Febris Recurrens, Seven Days Fever, Etc.

The peculiarity of this disease is in its definable febrile paroxysms lasting about six days, then remissions for as many days followed by relapse which have a tendency to pursue this typical course of fever and relapse for quite a time. The disease is a specific infectious trouble supposed to be caused by a micro-organism which is always found present in the blood of these patients, and known as the spirochaete of Obermeier. There are no special anatomical lesions found in this disease, though as in most fevers the spleen will be found enlarged and soft, and as in the malarial fevers the white blood corpuscles will be found in greater numbers than normal.

SYMPTOMS, COURSE, DIAGNOSIS.—Beginning with chill, fever and severe pain in back, head and limbs, the temperature rises usually rapidly, often reaching 104° on the evening of the first day. The pulse reaches 120 to 130. We may have severe gastric disturbances, delirium, jaundice, sweating is common. This fever holds up for about six days increasing in severity of all symptoms until the crisis approaches, when a critical sweat sets in, or diarrhoea occurs and all of the symptoms subside and

the temperature falls to the normal or even below. The crisis may come sooner than the seventh day or it may be delayed until the ninth or tenth day, but we have described the usual course. Convalescence is rapid, the patient feeling entirely well in three or four days, but about the fourteenth day he has a rigor and goes through the same course again. The diagnosis is plain; microscopic examination will show the micro-organism which is characteristic. The mortality is not great, being about four per cent.

TREATMENT.—It is not possible to cut this fever short or to prevent its recurrence. Quinine has been found of no service. It is best to treat the fever as any other continued fever by rest, diet, careful attention to nursing, and the treatment of individual symptoms and complications as they arise. The refrigerants and mild mercurials, with diuretics are indicated. In the stage of apyrexia tonic doses of mineral acids, iron, and quinine should be pushed.

PERIODICAL OR MALARIAL FEVERS.

GENERAL CONSIDERATIONS.—These fevers are all produced by the same poison, have many points in common, are easily convertible from one form to another and are influenced by the same line of treatment, especially by the more marked antiperiodic remedies. They are produced by *malaria*; and by this term we mean a condition of atmosphere poisoned by the presence of microscopic germs generated under the influence of heat and moisture upon vegetable or animal matter. This peculiar poison is found along sluggish streams or low marshes where there is abundant decaying vegetable matter and after we have had a prolonged degree of

summer heat. It seems to be a heavy poison often being prevented in spreading by dense trees, settlements of houses as in villages, etc. It may arise from newly ploughed earth which has been unworked for a long time and suddenly exposed to high sun heat. Thickly settled portions of cities are protected from this poison, and the sea coast is free from it, unless near marshes, salt water probably destroying it. The eucalyptus tree seems to absorb and destroy this poison. A continued temperature of at least 60° for two months seems necessary to develop it; and a decided frost or two will generally put a check to its further advance or activity. The poison enters our bodies through the air, and possibly also with our food and drink. Persons going about in malarial districts in the early morning hours with empty stomachs seem much more liable to be poisoned than persons fortified with a full meal. The principal forms of malarial fever are intermittent, remittent, congestive and a few bastard or complicated forms wrongly designated *typho-malarial*, *haemorrhagic-malarial*, etc.; all of these latter being only aggravations of the original forms of malarial fever.

INTERMITTENT FEVER.

This is one of the most typical forms of malarial fever, and is known as *ague and fever*, *chills and fever*, etc. In the early fall it is most prevalent, and next in frequency is the springtime. The most common form is the *tertian* or every other day, though we may have the *quotidian* every day; the *quartan* every fourth day, and so on for any peculiar freak it may assume.

SYMPTOMS, COURSE, ETC.—The chief features of intermittent fever are the three stages of chill, fever and sweating, followed by complete intermission or ab-

sence of all symptoms of disease to be followed by a repetition of the same symptoms in longer or shorter time as the type of disease manifests itself. These stages are called the cold, hot and sweating stages. The attack commences with a feeling of malaise, pain in back and limbs, yawning, weariness and lassitude; a sensation of coldness comes on with a creeping, shivering feeling, tremors, rigors and a feeling of utter miserableness. Headache, sometimes nausea, blueness and pinched appearance of skin. The chill lasts from a half hour to two or three hours, when reaction sets in violently. The pulse bounds with a full hard stroke, the face becomes flushed, headache increased, skin hot and dry, urine scant and high colored, mouth dry and parched. The thermometer shows an increase in surface heat of 105° to 110° ; and we should have mentioned that in the cold stage there is actual fever as will be shown by the thermometer. This hot stage may last from one to twelve hours when we have the sweating stage. This comes on gradually, the face first becoming moist and then the whole body becomes bathed in perspiration. With this fortunate condition all of the symptoms are generally relieved and the patient gradually reaches a condition of comfort. The headache, pain in back and limbs, nausea and general distress are all relieved and a pleasant sleep causes the patient to believe that he has gotten away from a most terrible enemy. The secretions are all restored and the thermometer indicates no actual fever.

During the intermission or apyrexia, treatment should be commenced, or we will have within certain space of time a return of this condition which may last for weeks or months, until the disease runs on into some graver form, or leaves the patient in a state of chronic anaemia. In this disease the nervous system becomes most pro-

foundly impressed so that after we have antidoted the poison we often find it very hard to break up these paroxysms, and this is the reason that many obscure drugs are credited with curing this disease after a failure with the more prominent antiperiodics. In all of these fevers we find hepatic and splenic engorgement with degeneration of the blood corpuscles.

TREATMENT.—During the cold stage, keep the patient as comfortable as possible with blankets, hot drinks and hot applications. In the hot stage the reverse obtains, giving cracked ice, refrigerant drinks, aconite if necessary and cold sponging. The sweating stage requires nothing as it brings relief. The main treatment is to prevent a return of the paroxysms, and is conducted in the intermission. Three things are to be accomplished to effect a cure. The liver and portal engorgement must be unloaded; the specific poison must be eliminated, and the resulting anaemia and nervous disturbances must be overcome with appropriate tonic remedies. As soon as the patient is free of fever give calomel, blue mass, colocynth, singly or combined in such doses as will act thoroughly and promptly upon the liver and clean out the alimentary canal. I think here ten grains of calomel reinforced with soda, colocynth, aloes or rhubarb is only a fair dose. From six to ten hours before the expected return of the chill, which may be looked for from one to two hours earlier each day of the paroxysms, the system must be impressed with the best possible antiperiodic obtainable. The salts of cinchona are considered almost a *specific* for malaria in most forms, and the *sulphate of quinia* is the salt relied upon in almost all cases.

The old idea, with which we commenced practice, of giving large doses at once, seems to us not to be the best.

We seldom give any patient over ten grains of quinia to prevent any ordinary paroxysm, and this we administer in two grain doses every hour or two so as to give the last dose a few hours before the expected chill. We find the greatest good to be derived from the quinia when we have acted well upon the liver, emptied the alimentary canal, and prepared the system for its reception and proper appropriation. The salts of quinia are useless unless administered under these circumstances. Thus given, small doses are required and they are thoroughly effective. We advise the continuance of this line of treatment with quinia for four or five days, and a return to it on the seventh and fourteenth days as precautionary measures. A good tonic of tr. chloride of iron, with a grain of quinine to the dose is of service after the discontinuance of the full quinia treatment. When the stomach does not readily manage the sulphate, we have great faith in the bisulphate of quinine. It is much more soluble and easily appropriated and thus acts quickly when we are in a hurry. After a failure with the various salts of cinchona, we may try many other much vaunted remedies, such as arsenic, (Fowler's solution) salicin, sulphate of copper in one-fourth grain doses, dogwood, eucalyptus and many other agents. Hyposulphite of soda has been used very successfully, and, on theoretical grounds, its use is to be commended as a germicide. After a very extended experience in malarial diseases, we would say to our readers that the great success lies in getting the liver and digestive system in good order, then intelligently using some salt of cinchona, and finally toning up the system to resist the effects of the malarial poison. When this is done we will not seek such a multitude of remedies. When, however, anaemia is well established and the disease becomes almost neurotic in character, we will

be compelled to avail ourselves of all manner of nervines, antispasmodics, tonics, mineral acids, reconstructives, change of locality, scenery, etc.

REMITTENT FEVER—Bilious Fever.

Due to the same cause as intermittent, it is ushered in with a chill, sudden high fever and all of its accompanying symptoms; headache, full pulse, great gastric disturbance, and coated tongue. Temperature 105° to 107° , delirium, often jaundice, bowels usually constipated. This is followed in ten to eighteen hours by sweating stage. For a few days we have these paroxysms of chill, fever and sweat, but unlike intermittent, the fever remits but never leaves the patient entirely. In a few days we have an absence of the chill with more continuous high fever, morning remissions and evening exacerbations. Uninfluenced by treatment this disease might go on into intermittent or into some low continued semi-typhoid condition or the popular "typho-malarial" form, or hæmorrhagic form. The duration of the disease is from three to six weeks.

DIAGNOSIS.—We have more often been perplexed to distinguish bilious fever from typhoid than any other possible condition, but when we note the sudden onset and rapid gain of temperature, nausea and vomiting, constipation, decided remissions, black tarry stools, jaundice and full bounding pulse we can leave out typhoid fever pretty safely.

TREATMENT.—From what has been written on the general management of malarial fever in a previous chapter, we can easily arrive at the best method for managing this form of malarial disease. Relieve the distressing nausea and bilious vomiting with cracked ice, lime water,

mint water, champagne and ice, granular effervescing bicarbonate of potassium, citrate of magnesia, etc. A mustard plaster, bruised mint, or spice poultice over the epigastrium, will all be found valuable auxiliaries. Act well on the liver and intestinal canal. If the stomach is very irritable give three grains calomel with a little morphia, or cocaine on crushed ice every hour until twelve grains are taken. If this is not sufficient to move the bowels thoroughly follow with some saline purge, epsom salts, Rochelle salts, citrate of magnesia, Seidlitz powders or something similar. As soon as the fever lowers a little, and after a good purge, in the remission commence and give quinine in solution, pill, or capsule, either ten grains at one dose, or two to three grains every two hours until twelve or fifteen grains have been taken. Come in between these remissions and follow this line of treatment until the fever is checked. Should this fail and the disease assume a decided typhoid form, lessen the daily quantity of quinine, and look out for symptoms and complications. If there is no decided remission or favorable moment for giving quinine do not wait, but crowd it into the system. Observe the usual rules as to fever diet, attention to the general comfort and hygienic surroundings of patient. Aconite, veratrum viride, antipyrine, pot. bromid. and other similar agents may be needed for head symptoms and arterial tension. Cups, leeches and blisters are occasionally of great service applied to back of neck for severe head symptoms. Treat stage of convalescence as in intermittents.

HAEMORRHAGIC MALARIAL FEVER.

This aggravated form of remittent has been honored with the above special name. It is merely an intense remittent however, which is apt to be accompanied within

the first few days by sudden jaundice, hæmorrhage from gums, nose, bowels, kidneys or elsewhere as the sweating stage commences, and is absent or less intense during the remission. After a while this hæmorrhagic condition becomes persistent and lasts through the remission. Where the kidneys are the source of hæmorrhage this condition is called malarial hæmaturia.

TREATMENT.—The essential treatment for this condition is that of remittent fever, only requiring a more vigorous use of quinine administered at the earliest possible moment without waiting for subsidence of fever or remission. These conditions are merely to be considered as complications and increased saturation of the system with malarial poison, and demand treatment based on the known cause. In hæmaturia dry cups over the kidneys, and the internal administration of twenty drops of ergotole every four hours will be found very efficacious.

CONGESTIVE MALARIAL FEVER Congestive Chills, Pernicious Malarial Fever.

This is the most dangerous form in which malarial poisoning can manifest itself. It usually commences as an ordinary intermittent or remittent but within a few paroxysms we will find the patient having a prolonged chill, with cold surface and extremities; the skin is blue and pinched, the circulation is slow and the respiration labored and sighing, the pupils (in brain congestion) are dilated usually and have a fixed stare. In short the patient may be in profound coma, or if other organs than the brain are the seat of congestion, we may have great difficulty of respiration with bloody froth from the lungs, or intense vomiting when the stomach is the seat of congestion. The whole nervous system is profoundly impressed by the poison.

TREATMENT.—Must be prompt and active to bring on reaction, and equally as important will it be to prevent a recurrence of this dangerous condition. Frequently patients die with the first chill, more so in the second, and the third chill is almost certainly fatal. When the patient is seen in the chill, every possible means must be used to bring on reaction. Brisk frictions with brandy and cayenne pepper; blankets wrung out of hot water, hot water bottles, and sinapisms should be applied to the surface. Where the brain is severely congested local depletion and cold applications will be of service. Faradism to the spine, frictions with hot turpentine and rectal injections of hot brandy and milk have all aided us in bringing on reaction.

If the patient has had a severe chill and we see him when another one is impending we must endeavor to prevent its advent or mitigate its force. An hypodermic administration of morphia, followed by one of pilocarpine will either arrest it or lessen its force. The sheet-anchor here is *cinchonism*. As soon as it is possible to get it into the system, regardless of all other conditions, from thirty to sixty grains of sulphate or bisulphate of quinine should be given the patient, either by mouth, rectum or subcutaneously, of course if we have to resort to the hypodermic method smaller doses must be used. The only plan of safety is to bring the patient thoroughly under the influence of the salts of quinia and keep him impressed for a week or ten days, increasing the quinia every seventh day for some weeks. These patients require good clothing, food, and tonic after-treatment.

OTHER MALARIAL DISEASES.—The multitude of diseases with which malaria associates itself, influencing and modifying each one can hardly be enumerated.

The late lamented Prof. Otis F. Manson, M. D., of Richmond, both in his lectures, as an author, and in practice demonstrated the effects of malaria upon all diseases occurring in persons subjected to the malarial poison; and some of the most brilliant results we have ever achieved in practice have been due to the detection of this enemy in cases of dysentery, pneumonia, hysteria, hæmorrhagic troubles, neuroses, etc., and the timely administration of impressive doses of quinine. For all of which we have to thank our honored instructor whom we have mentioned above.

YELLOW FEVER.

This fever found only under certain conditions of high temperature, low moist conditions and in certain geographical limits, seems to be due to a specific germ, possibly vegetable, consists of one paroxysm and three stages. It is feebly contagious and seems to be propagated only where soil and surroundings are ready for its development. It seems necessary to bring a quantity of the material and air of the infected locality into any suitable locality for its further development before it can be spread as an epidemic among the people. There is almost absolute certainty that in a healthy locality a sick person with yellow fever cannot communicate it to those around him. It is therefore essentially a disease of certain localities or developed on ship-board or at other ports by bringing infected merchandise, air, etc., into such localities as are susceptible of infection. It is only to be found on the sea-coast or near a large river emptying into the sea.

SYMPTOMS, COURSE, ETC.—Commencing with an indistinct or very decided chill, after an incubation from

a day or two to twenty-four days, the patient is taken with fever, pains in back and limbs, intense thirst, nausea and vomiting, hot dry skin, flushed face, epigastric tenderness, fiery look of the eyes, supraorbital pain and violent headache. Bowels are usually costive, and delirium often present. This fever lasts from one to three days and constitutes the first stage. The second stage is a period of intermission or remission—lull—in which the symptoms all abate, the flush of face giving place to a yellow or jaundiced hue of skin. The pulse, respiration, diminished heat of skin, all indicate that the patient is better, he feels better and frequently sits up. Sometimes convalescence commences in this period of remission and the patient recovers; otherwise the third stage, that of collapse, ensues after a remission of twelve to fourteen hours. This is evidenced by profound debility, rapid feeble pulse, circulation slow and impeded, deep yellow or bronzed appearance of skin, brown dry tongue, great gastric irritability, *black vomit*, (altered blood), hæmorrhages from nose, throat or elsewhere, low muttering delirium, cold clammy sweats, hiccough, convulsions, death occurring on the fourth to sixth day. The diagnosis of this disease when mild must be from the aggravated forms of malarial; when intense it is plain. Locality and prevailing epidemics will clear up the case. The mortality is very high, from 15 to 80 per cent. according to intensity of poison and local conditions.

TREATMENT.—We have no specific or satisfactory treatment for this disease and a plain expectant plan is about as satisfactory as any yet adopted. The patient should be kept cool and comfortable as possible, strict quiet in the recumbent posture with refrigerant drinks should be observed. Granular condition of the heart

muscle with threatening failure should make us guard against all undue exertion. The diet should be small in quantity and liquid in the first stages. In collapse stimulants may be needed, heart tonics, digitalis, strychnine, cocaine, strophanthus, cracked ice, champagne; small doses of calomel in early stages. For fever, nausea, thirst, etc., give carbonated waters, neutral mixture, Vichy, etc. The latest line of specific treatment suggested is the administration of small doses of corrosive sublimate with bicarbonate of sodium in large quantities of water every two or three hours. A very successful line of treatment has been in giving a pill of calomel, quinine and rhubarb every two or three hours, along with iced acid drinks and little or no food for three days; sinapisms or dry cups to the epigastrium, and cocaine to relieve nausea; stop black vomit, and hold up a weak heart.

ERUPTIVE FEVERS.

GENERAL CONSIDERATIONS—The eruptive fevers are characterized by an eruption, definite course, contagiousness, self-limited nature, and by being protective against other attacks in the same individual. The principal fevers of this class are, scarlet fever, measles, rotheln, small-pox, chicken-pox, and varioloid.

SMALL-POX—Variola.

An acute highly contagious eruptive fever depending upon a specific poison communicated from patient to patient or by infected articles of clothing, furniture, etc. The period of incubation is about fourteen days.

SYMPTOMS.—The disease commences with a fever and intense headache and terrible pains in back and limbs; on the third day of fever a peculiar papular eruption ap-

pears, at first on the forehead, face and lips and finally over the whole body. On the next day, second of the eruption, these papules become vesicles. On the third, fourth and fifth days these vesicles become pustules. From fifth to eighth day the pustules increase in size, fill with pus and are surrounded with a distinct areola. At this time these pustules become indented in the centre, forming the peculiar *umbilicated* pustule known in this disease. About the eighth day of eruption (eleventh from commencement of fever) the pustules are generally at their height, pus oozes from them and scabs begin to form over them. From the fourteenth to the twenty-eighth day these scabs form, dry, and fall off. From the eighth to the fourteenth day when the scabs are forming it is known as the period of *maturation*. By the twenty-eighth day most of the scabs have formed and fallen off, leaving little red or livid spots which become white pits in the skin. The fever is peculiar in small-pox. It subsides when the eruption appears, and the patient is much easier, and it reappears and is known as *secondary* fever when the pustules mature about the eighth or ninth day.

Variola is said to be *discreet* when the pustules are scattered; *confluent* when they coalesce, and *malignant* when there is extravasation of blood in the pustules. The grade of eruption usually determines the severity of the disease; the mortality ranging from four per cent. in the *discreet* to fifty in the *confluent*, and ninety-eight in the *malignant* form. One attack generally protects the patient from this disease for life, though it has occurred a second and third time in the same patient.

DIAGNOSIS.—Is easily made out by the three days fever, and accompanying pains in small of back and limbs; with the eruption on third day and its becoming vesicular and pustular in the time mentioned under symptoms.

TREATMENT.—The patient should be isolated for the safety of others, and should be kept in a comfortable well ventilated room with little furniture or bedding to become charged with morbid germs. A general fever treatment should be adopted as regards diet, etc. It is positively harmful to stifle these patients in close, hot apartments and drench them with hot teas under the idea that the eruption will be hastened. Cracked ice, cooling drinks, and light nutritious diet should be the line of general treatment, with concentrated food and stimulants later on as the system will demand about the period of maturation. For violent pain in back and limbs opium and potass. bromide. Nausea and vomiting will be helped by using the refrigerant diaphoretics, neutral mixture, liqr. ammonia acet., and similar preparations. Granular effervescing citrate, or bicarbonate of potash are very grateful to the patient. In conjunctivitis, pharyngitis, and rhinitis, especial care must be taken to cleanse and disinfect these surfaces with antiseptic solutions of carbolic acid, bichloride of mercury or similar agents. The care of the eyes in confluent cases is of the utmost importance. Most authors insist that there is no specific for this terrible disease and consequently the treatment must be conducted upon the general plan applicable to these symptoms as they arise. We wish, however, to state very frankly to our readers that we have found a certain line of specific treatment so valuable that we regard it as well nigh a specific. We have given it faithful trial in a large number of cases of small-pox, and we have succeeded so well in cutting short and reducing the formation of pustules that we have very little concern when we can see a patient just as the papules are appearing.

We refer to the peculiar action of *salicylic acid* in this disease. It unquestionably has the power to abort the

disease to such an extent as to render it almost a specific. It will reduce temperature, relieve pain, and prevent the appearance of pustules.

Some eight or nine years ago we had a most excellent opportunity to test the value of this agent when Richmond, Virginia, was suffering severely with an epidemic of small-pox. A few instances will suffice to show how we treated these cases and how they behaved. We were called to see a poor negro man one morning, living in a small kitchen room about 10 x 12. His wife had fled and we found him covered with the small-pox eruption in the vesicular stage. In this room were four children, the oldest not over eight years of age. None of these children had ever been vaccinated, and the oldest one had a fever upon it at the time and papules were beginning to appear upon the face and forehead. We ordered a *quart* mixture containing twenty grains salicylic acid, two drachms liqr. ammon. acet., and one drachm spirits nitre dulce to the ounce. Of this we gave the man a half ounce every three hours, and to every one of the children, sick and well, proportionate doses at the same interval. In addition we gave the adult one grain calcium sulphide three times a day, and smaller doses of the same drug to the children.

The father's case ran a very mild course; the pustulation being very much abridged, and in ten days he was well. The child escaped with less than three or four small pustules, and the other children escaped entirely. Some time afterwards, I related this experience to Dr. R. H. Cowan, then one of the small-pox physicians of this city, and he was so much interested that in a few days he called upon me to go with him down on Seventeenth street, in a squalid portion of the town, to see an entire family just blooming out with the fever and papules.

We placed everything in the crowded hut on the line of treatment suggested ; and the developed cases soon ended in a most favorable manner, while it prevented the appearance of the disease in all who had not reached the papular stage.

We believe fully that the salicylic acid alone is the effective agent, but on scientific principles we have combined the other ingredients and have no doubt that they aid still further the action of the acid. Many suggestions have been offered to prevent pitting of the face, but most of them may be summed up in one general direction to keep the face covered with some bland oil or ointment with glycerine occasionally added, and the room kept darkened. If the case is seen early enough, the use of the remedies suggested for general treatment will so abate the symptoms that there will be no fear of disfigurement.

VARIOLOID—Modified Small-Pox.

Varioloid or modified small-pox occurs occasionally in persons who have been protected by vaccination. All of the symptoms are those of true small-pox except in their very mild character. The fever, eruption and duration of the disease are all much modified. The same care should be used to prevent these patients spreading the disease, as they can communicate genuine small-pox to any unprotected persons.

VACCINATION.—The great prophylactic against small-pox is vaccination. This is performed by introducing the virus or lymph from the eruption of cow-pox appearing on the udder of the heifer, or from lymph or virus which has passed through the human system into an abraded surface. The ordinary crust from the arm or the quills charged from the heifer may be either used,

though the bovine virus direct is a little more apt to be followed by a higher grade of inflammation and insures no special advantage as to safety against small-pox over the humanized variety. We would say by way of parenthesis, that even though a person may have been exposed to small-pox, if he is immediately vaccinated, the chances are that by the quick action of the vaccination the disease will be anticipated and in many cases either aborted or greatly mitigated. The method of performing vaccination needs no description here. It is simply necessary to abrade, puncture or scarify the skin and introduce a little of the moistened virus when the capillaries will take it into the circulation—hence the only caution would be not to draw blood, but simply produce a blush with exudation of serum and you have the best possible condition for insuring a successful vaccination. If successful, a vaccination pursues about this course : On the fourth day a red papule appears ; between the fifth and seventh days this papule becomes a decided vesicle. By the eighth day the vesicle reaches its height and is surrounded by an immense angry red areola ; and by the tenth or eleventh day it becomes a matured pustule with a proportionate areola. From the thirteenth to the fifteenth day the local inflammation fades and the crust or scab forms, which finally falls off about the twentieth day.

SCARLET/FEVER—Scarlatina.

There are three varieties—Simplex, Anginosa and Maligna, which are only terms used to signify the intensity of the peculiar attack which may be of the simple or mild variety, or with its chief force spent upon the throat, or finally of a very rapid and malignant type.

PERIOD OF INCUBATION from one to twenty-one days.

SYMPTOMS, COURSE, ETC.—This highly contagious, acute, eruptive fever commences with an abrupt onset of vomiting, chill, or convulsion, with sudden high fever and pulse ranging from 130 to 180. After twenty-four hours of fever the eruption appears as a bright scarlet rash about face and neck. This is at first in form of minute dots, but in twenty-four hours more it is confluent and over the entire surface. The appearance of the patient may be likened to a boiled lobster. This eruption remains at its height for four or five days and gradually fades away. Desquamation sets in with the subsidence of the eruption and may be going on for two or three weeks. The fever continues high during the eruption, but does not leave the patient entirely until very late in the desquamation stage. In the anginose variety the throat symptoms are more marked and severe than in the simple variety, and the tonsils are enlarged and covered with a dirty membrane. In the malignant form the symptoms are all aggravated by delirium, convulsions, petechial spots, grave kidney symptoms, etc.

THE SEQUELAE of this disease are both numerous and grave. The chief being acute albuminuria, with the attendant consequences of structural kidney disease, then heart trouble, dropsies, deafness, blindness, chorea, chronic anaemia, chronic diarrhoea, etc., etc.

PROGNOSIS.—Must always be guarded, and the mortality in all types of cases would be about fifteen per cent.

TREATMENT.—The patient should be placed on the usual fever diet and general treatment. Attention to the action of skin and kidneys is of the utmost importance in the management of these cases. The skin

should be freely anointed with some oleaginous substance such as perfumed lard, oil or vaseline. It greatly allays the annoying itching and is advantageous in reducing temperature. The usual gentle diuretics and diluents are indicated for the kidneys. If there is tendency to heart failure, quinine, brandy and digitalis are all indicated. For the throat symptoms an abundance of ice in the mouth is grateful and beneficial, while pleasant antiseptic and disinfectant washes and gargles are to be used. It is very necessary to guard the patient against exposure to cold or dampness about the time of desquamation, as the disposition to albuminuria and general kidney troubles is very great.

For some weeks after the patient is convalescent he should be carefully guarded against exposure and be given a general tonic of iron, bark, etc.

MEASLES—Morbilli, Rubeola.

This acute contagious disease is confined mostly to the period of childhood, though adults are by no means exempt from it when exposed to it and when they have not been the subjects of the disease in childhood.

SYMPTOMS, COURSE, ETC.—After a period of incubation ranging from one to three weeks from time of exposure, the patient experiences chilly sensations, catarrhal symptoms and fever. There is some decline of fever on the second day, but the other symptoms persist and on the fourth day the characteristic eruption appears and fever and catarrhal symptoms all become increased in severity. After the eruption has lasted for three or four days it begins to decline and all of the symptoms are speedily dissipated.

The special symptoms for diagnostic purposes are the peculiar behavior of the fever, which declines on the

second day, and rises again on the fourth with the eruption; the period of eruption, and the intense catarrhal symptoms attacking eyes, throat and nose violently. The temperature is peculiar also as it rises abruptly to 102° or 103° on the first day, falls almost to the normal on the second day and again reaches its former high grade on the fourth with the advent of the eruption. With these symptoms a mistake need not be made in diagnosing the disease.

TREATMENT.—This is simple and satisfactory and consists in giving a light laxative, gentle diuretics, diaphoretics, and acidulated drinks, warm or cold, as the patient may prefer. The old fashion remedy of flax-seed lemonade with a little spirits nitre is a most excellent one and will in the majority of cases be all that is required throughout the attack. Of course there will be met with now and then, cases which will require most careful attention to save life. We will have intense fever with cerebral symptoms, delayed eruption, lung troubles, coma, etc. Such cases require intelligent management on general lines. High fever may call for aconite, hydrocyanic acid, jaborandi, or the lancet. We may have to give more attention to preventing pneumonia by local measures, quinine and similar agents. Patients may require the warm bath in threatened coma from arrest of eruption. We failed to state in our description of the disease that the eruption first appeared on the face and neck and presented the appearance of patches of irregular crescentic rings of flea bites.

GERMAN MEASLES—Rubella, Rotheln.

This is a hybrid measles characterized by an eruption on the first or second day of an irregular kind and with

less fever and catarrhal symptoms. The throat and glands of the neck are more often affected and the eruption may appear and reappear several times during the course of the disease which usually lasts about eight or ten days.

TREATMENT.—A modified line of measles treatment will be all that will be necessary, and most cases do well on the least medication.

CHICKEN-POX—Varicella.

The special features of this disease of childhood are the presence of mild fever after a slight chill with a peculiar scattering vesicular eruption on the second day of fever. The eruption is always vesicular and sparsely scattered over the trunk. It never becomes pustular and after three or four days forms large scabs, sometimes leaving pits. The period of incubation is about a week and the duration of the disease about as long.

TREATMENT.—The child should be kept in a room of an equable temperature and treated as if he had a mild case of measles. Generally a mild laxative and slight febrifuge drinks are all that will be required in these cases. Spirits nitre, spirits of mindererus or lemonade will be beneficial and refreshing to the patient.

ERYSIPELAS.

Sometimes called Rose or St. Anthony's Fire may be classified as one of the eruptive diseases, though there is no definite course which it pursues or has it a period of incubation. The question of its contagiousness is one of doubt, and while some practitioners consider that there is a contagious element in it, most physicians do not look upon it as such.

SYMPTOMS.—It commences with the usual chill of most eruptive fevers and is followed with moderate febrile disturbance, then an eruption or rather a bright red spot makes its appearance usually on the face or about the head or neck. This spot is accompanied with greatly increased fever and rapidly increases in size, spreading over the face or up towards the head. The skin assumes a bright, swollen and glistening appearance and a sensation of itching and burning is complained of by the patient. The rapid advance of the eruption, with high fever and the oedematous and red glistening color will make out the diagnosis.

TREATMENT.—A gentle antifebrile course should be pursued. A dose of Rochelle salts, citrate of magnesia or a seidlitz powder will be of service in the beginning. Diaphoretics act well and the kidneys should not be allowed to neglect their duty. We have found much benefit in reducing the determination of blood to the skin by the use of a preparation of ergotole, a most valuable agent mentioned elsewhere in this book. We cannot expect to cut the advance of the disease short by local measures, although many practitioners rely very much upon the efficacy of iodine or nitrate of silver to the sound skin about an inch ahead of the inflamed surface, with the hope that its further advance may be checked. It is undoubtedly true that this is sometimes effectual and we advise its trial to a reasonable extent along with other measures. We have found a mild and cooling application which reduces the temperature and protects the parts, of far more service generally than any abortive attempts. The patient should have a light diet of milk and stale bread, fruits and light broths, and should be kept quiet and free from excitement. The constant

application of cloths wet with a solution of sugar of lead and glycerine and with the addition of cocaine to the solution if the skin is very painful, or itching is much complained of, will prove to be a valuable line to pursue. The administration of small doses of quinine and tincture of chloride of iron every two or three hours is a popular practice and one which seems to be highly beneficial. Where the disease rapidly extends to the scalp and affects the brain, we must resort to vigorous purgation and use prompt cerebral sedatives such as potass. bromide, aconite, jaborandi and ergotole. Many cases of this disease will be characterized by extreme prostration from the beginning and will require careful supportive treatment both in the way of drugs proper and in concentrated foods. Brandy, eggs, cream and liquid beef will all be needed. Where phlegmonous abscesses form they should be opened and treated antiseptically.

DENGUE—Breakbone Fever, Dandy Fever.

Dengue or breakbone fever as it is commonly called, is a disease which is seldom seen in this country except in the southern portion of the United States. It is ushered in with the milder symptoms of rheumatism, such as pain, swelling and stiffness of the smaller joints and aching of the muscles in various parts. The muscles of the neck are especially affected, and the stiffness of the muscles generally give the patient that appearance in walking which causes it to be called "Dandy" fever. There is fever and headache lasting for three or four days when the fever declines and the symptoms are lessened in severity. After a few days interval the symptoms all return and headache and gastric irritation are more pronounced. The tongue is heavily coated, and anorexia is marked. About the sixth day of the disease an eruption

appears resembling scarlet fever, nettle rash or measles. This eruption cannot be relied upon as a distinctive sign as it may present itself under many very different forms, though it is more likely to favor that of scarlatina. This rash lasts for two or three days usually and all of the symptoms rapidly decline after it has made its appearance. The disease is contagious.

TREATMENT.—Patient must be placed on the usual general line of treatment appropriate for all fevers and kept in bed until the disease is at an end. We know of no special line of treatment which can be called specific for this trouble. Quinine has been given in moderate doses all through the disease with fair results. Recently salicylic acid, antipyrine, and phenacetine have been recommended as affording great relief. We would prefer a good mercurial purge in the commencement, and then the administration of repeated doses of quinine, capsicum and Dover's powder in combination. Later on in the disease the patient may require supportive and stimulating treatment, and certainly when the fever subsides and convalescence commences it will be necessary to put the patient upon a good tonic for some time. The mineral acids, quinine, strychnia, and tr. ferri chlor. are all valuable agents in the convalescing period.

DISEASES OF THE DIGESTIVE ORGANS.

There are many things in common in all diseases of the alimentary canal. The entire route is lined with mucous membrane and an affection of one portion of the tract often produces a corresponding disturbance in the whole canal. Very often an attack of disease in one part

of the canal will be extended entirely through the tract. With some allowances for a variation in the secretions and physiological reactions of the same in different portions of the canal, treatment applicable for inflammation or catarrh in one portion of the tract is equally applicable for all parts. We have in advance pages of this book given an outline of the peculiar behavior of mucous membranes under the influence of inflammation. We find the membrane red, congested and secretion at first checked. Fever is invariably present and then we find a supersecretion of thick mucous with a rapid tendency to the production of pus. To relieve congestion, remove all sources of irritation, quiet the circulation and protect the organs from local irritating secretions are important measures in all inflammatory conditions of the mucous membrane of the alimentary canal.

STOMATITIS—Inflammation of the mucous membrane of the mouth.

This disorder is mostly confined to children, though we have seen it in a most aggravated and painful form in the adult. It may appear as an ulcerative, follicular or catarrhal condition, and is due to altered or vitiated secretions of the mouth or stomach, to want of cleanliness of teeth and gums, or to the introduction of irritating substances in the mouth. It frequently follows acute fevers, gastritis, or the exanthemata.

SYMPTOMS.—There is a red fiery condition of the mucous membrane, and the patient experiences a sharp, burning pain in the mouth upon taking food of any kind and especially when taking sweets or acids. Often small ulcers will be seen dotted here and there over the tongue, lips and buccal membrane. Generally this con-

dition will be associated with disturbed digestion in stomach and bowels. The diagnosis from this description is perfectly plain.

TREATMENT.—Cleanse, disinfect and soothe the inflamed surfaces with lime water, boracic acid, borax and tr. myrrh, or any similar agent. Correct the secretions and the undue acidity of stomach by a gentle purge of calomel and soda. Follow with lime water and milk and the blandest diet until all congestion and irritation has subsided. In the ulcerative, follicular, or catarrhal conditions of this trouble we have an agent in the peroxide of hydrogen that is of the greatest possible value, and as it has a very wide range of usefulness in a multitude of other affections we will be pardoned for noticing the remedy somewhat in detail. Peroxide of hydrogen as made by Mr. Chas. Marchand of New York, (and by the way this is the only preparation of it that we have ever found of uniform purity and strength) is a colorless, odorless and tasteless liquid yielding over fifteen times its own volume of oxygen. This preparation has no injurious effect upon the living animal cell; has no toxic properties and may be taken internally or used freely externally without the least fear. It has a destructive and immediate action on vegetable cells, microbes, germs, pus and other morbid products. When brought in contact with diseased surfaces—either skin or mucous membrane—it is immediately decomposed, giving off fifteen times its own volume of nascent oxygen which at once destroys all pus, bacteria and other products of disease, leaving the parts sweet, clean, and thoroughly disinfected. It can be readily seen from this how valuable this remedy will prove in the hands of the practitioner in thousands of cases. For ordinary gargles, washes, or internal use

it may be diluted with from four to ten parts of water. In stomatitis it will disinfect the mouth and hasten the healing processes after all other agents have failed, and in gastric and intestinal indigestion it will arrest the development of germs and fermentation. Indeed, wherever we need the ideal pus and germ destroyer it is the remedy *par excellence*.

TONSILLITIS—Inflammation of the tonsils.

This affection, when severe, is also called quinsy and consists in the extension of inflammation from the mucous membrane to the glandular structure of the tonsil beneath. The disease is ushered in with malaise, chill and some irritative fever. There is soreness of the throat, swelling of the tonsillar glands, difficulty of swallowing and often pain in the limbs as if the patient had taken a general cold. The diagnosis is plain.

TREATMENT.—The tendency of this affection is to run a rapid course towards suppuration and the suffering in the case of full blooded and plethoric patients, where the trouble is not promptly jugulated, is out of all proportion to the simple character of the malady. A good sharp purgative of epsom salts, Rochelle salts or citrate of magnesia should be given as soon as the patient is seen. Warm or hot gargles may be used every half hour with warm poultices of flaxseed or corn meal mush externally. Stimulating and anodyne liniments are often indicated. Spts. turpentine, camphor and laudanum with sweet oil make a very good liniment. The skin should be kept active with small doses of ipecac or jaborandi, and we should endeavor to prevent and forestall suppuration by the prompt and continuous administration of grain doses of sulphide of calcium every two or three hours.

We have the greatest confidence in this remedy and believe that when used early and faithfully it will almost always prevent the formation of pus in any inflammation of the glandular system.

PHARYNGITIS—General Sore Throat.

This may be due to a thousand causes, and requires in some cases for simple acute conditions, only a little astringent gargle or wash, and on the other hand it may become one of the most annoying, chronic and intractable of affections. In the chronic form we find a thickened condition of the membrane with altered secretions and constant tendency to a return of the trouble under the slightest provocation from dust, diet or cold.

TREATMENT.—Depends upon the cause. If the case is one from ordinary cold, a gargle of alum, salt, or vinegar will often afford relief. In the commencement of an attack from cold or exposure it may frequently be aborted by the immediate use of guaiacum, which may be administered in the form of lozenges made of fruit paste, to be dissolved slowly in the mouth. The use of a foot bath, a Dover's powder and a cup of sage tea together with a brief sojourn in bed will also prove a very certain means of cutting short the development of an acute attack. The chronic variety will require more care to find and remove the cause, which very often will be found to be in the stomach, or in the nasal organs. Again it may be due to general impoverishment of the blood, or to some fault in the nervous system. Here we have to resort to the most approved course of systemic building up by iron, cod liver oil, the hypophosphites of lime and soda, arsenic, phosphorus and drugs of this class. The diet should be full and assimilable and rich in blood-making material. Locally the throat will re-

quire the application of nitrate of silver, blue stone, carbolic acid, and undiluted tincture of iron. Sometimes much good is accomplished in the intractable cases by continued counter-irritation with croton oil, oleate of mercury, etc.

GASTRITIS—Inflammation of the Stomach.

This condition is variously termed acute and chronic gastric catarrh, simple inflammation, and by some, chronic dyspepsia. The acute form is generally the result of some violent irritant, either in the form of corrosive poisons or of acrid and disordered secretions.

The symptoms are severe burning pains, increased by taking food, incessant nausea, vomiting of mucus, fetor of breath, and in some cases often followed by attacks of diarrhoea, with fever of more or less severity.

TREATMENT.—If due to some poison, the same should be antidoted and evacuated from the stomach. The stomach should be kept absolutely at rest and counter-irritation in the shape of blisters, cups and stimulating fomentations should be used. The intense pain and nervous irritation should be abated with morphine, cocaine, caffeine and similar drugs or agents. Where the stomach fails to retain these agents, they should be used hypodermically. Hydrocyanic acid, for extreme irritability, is a most excellent remedy. The diet should consist simply of liquid nourishment in the shape of lime water and milk, frozen cream, and after a time, the blandest possible broths.

In the form known as acute gastric catarrh, which is often known as a bilious attack, we have a loathing of food, heavily coated tongue, constipation and bilious vomiting and epigastric pain.

A prompt purgative of calomel and soda or podophyllin followed by some of the salines, will be found a most effective early treatment. For the irritation of the stomach, we may use lime water, hydrocyanic acid, soda-mint, a little champagne and ice, bismuth, etc.

CHRONIC GASTRITIS.

This is more properly called chronic gastric catarrh. It occurs about middle life, or after, and is more prone to attack hard drinkers, or persons who have been subjected to repeated attacks of gastritis.

SYMPTOMS.—We have early morning vomiting, consisting especially of glairy mucus, thirst, delayed and painful digestion, flatulency, acid eructations due to the fermentative processes going on in the stomach. There is usually thirst, fictitious appetite, with some tenderness over the stomach.

TREATMENT.—It is important that the patient should change his whole manner of life. He should take nothing but good nutritious and easily digested food, and none but that of the very best quality should be given him. Starches and sugars should be avoided and the stomach should be washed out occasionally with warm water rendered alkaline in inveterate cases. An excellent substitute for this stomach washing is the drinking of hot water about twenty minutes before taking food. A half pint of hot water quickly swallowed washes out the accumulated mucus and prepares the stomach for the reception of food. The diet should consist mostly of animal food, and free from all unnecessary condiments. Steaks should be rare, and wild game is always preferable to all other kinds of meat. In the way of drugs we would suggest pepsin, mineral acids, and the vegetable pepsin

known as papoid ; and in painful conditions, cocaine, bismuth, belladonna, etc. Where the liver is sluggish, the milder mineral waters may be used to advantage, especially those of an alkaline reaction.

ULCER OF THE STOMACH.

This condition usually follows a chronic disease of the stomach. It may be found at any portion of the stomach, though its favorite seat is either at the cardiac or pyloric orifice. The symptoms are usually those of aggravated and painful dyspepsia, with anorexia. The pain is fixed and not general, as in dyspepsia. It is increased immediately after taking food and there is generally vomiting after food. We may find induration and hardness over the seat of the ulcer ; occasionally, though, the diagnosis would be completed by the history of the case and character of the pain. It is always increased by taking food. Finally, haemorrhages occur from the stomach, either as an admixture of blood with the ejected food, or as independent haemorrhages later on. In simple cases the prognosis is fairly favorable in good subjects.

TREATMENT.—This is essentially a question of rest to the organ ; protection to the ulcer and improvement of the patient's condition. We rest the organ by giving it nothing to do ; we protect the ulcer by neutralizing all irritating secretions by bland and soothing diet, always liquid, and aided by such drugs as will allay pain and form a protective coating for the surface of the ulcer. For this purpose we find cocaine, morphine and bismuth exceedingly valuable. Patients have been kept for weeks upon nothing but lime water and milk ; and quite recently a case has been reported in which the patient with an enormous gastric ulcer, lived entirely upon ice-

cream for a period of from six to eight weeks, and eventually recovered. For the haemorrhages we would recommend turpentine, opium, ergotole, etc.

GASTRIC CANCER.

This disease occurs usually after middle life and may consist of any form of cancer. The scirrhus is the form usually seen and it generally affects the pyloric orifice, though any portion of the organ may be involved. Many of the symptoms of acute gastric catarrh are common to those of cancer of the stomach.

Its most common seat is at the pyloric orifice, though it may appear in any portion of the organ. We find great flatulency, acid eructations and fermentations. Among the special symptoms which would lead us to make a positive diagnosis we would find pain, vomiting, haemorrhages and the presence of a tumor. The pain is independent of food and may be felt at all times or at odd times. It radiates rapidly and is of a sudden, shooting character.

If the cancer is at the cardiac end of the stomach, vomiting occurs almost immediately after taking food; if at the pyloric orifice, it occurs several hours after eating, though sometimes it comes on sooner.

TREATMENT.—Our treatment can only be palliative; we do not expect to cure the disease. The remedies suggested for the treatment of gastric ulcer, as well as the diet, are nearly all indicated in this trouble, with the addition of such constitutional agents as are supposed to affect the general system. For this purpose arsenic, the hypophosphites, corrosive sublimate, and simple, general alteratives are indicated. For the fermentation, pain and acidity, the same remedies mentioned under the head of Gastric Ulcer are applicable here.

DYSPEPSIA.

This has truly been termed the American disease and may be traced in great measure to the manners and customs of our country. It is undoubtedly true that this disease is produced by the gross disregard of all the common laws of health in this country. In America the rush and struggle of the business man causes him to take his food hastily at odd hours, and with his mind thoroughly concentrated on his business affairs, he gives little thought to the proper care of his health. The constant desire to bring out new dishes and to add to the luxuries of the table, and the wide departure from our primitive methods of living, late suppers and irregular hours for meals, have all contributed to bring about an unnatural condition of affairs in our digestive organs. The result is dyspepsia, with all of its attendant evils and consequences. It would be impossible to classify all of the symptoms of this disease. We have nervous dyspepsia, flatulent dyspepsia, acid dyspepsia, water-brash and hysteria. The symptoms may vary from simple heart-burn to the most aggravated forms of nervous disturbance. We may have flatulence, heart-burn, nausea, pain, headache, vomiting, heart palpitation and, indeed, almost any symptom.

TREATMENT.—The most important measure of treatment consists in improving the patient's general condition, avoiding improper food, insisting upon sufficient physical exercise and in the use of such medicine as will correct urgent and pressing symptoms. All foods that favor fermentation and the formation of flatus should be prohibited most strictly; white fish, boiled game and rare meats are more likely to agree with the patient. Sugars and starches and the quantity of food should be limited, while the quality should be of the most nutritious char-

acter. In this, as in other diseases, the patient must become a law unto himself, as no positive rule in dietetics can be given for general application. It is equally harmful to place the patient upon too strict a diet, as many dyspeptics have their troubles aggravated by withholding the proper food from them. Acidity may be corrected by the use of charcoal, magnesia, lime water, etc.

In all cases where the stomach is primarily at fault in furnishing a sufficient quantity of gastric juice, it has been the practice to try to supplement this deficiency by the administration of the artificial pepsins. A very fair substitute is prepared by making an acid solution of any of the good grades of animal pepsin, using dilute hydrochloric acid and sufficient water to make a properly diluted mixture. This may be administered before each meal, and in many cases proves a very valuable aid. Where the trouble is partly intestinal we endeavour to supply the lacking elements here also by the use of soda, pancreatin and bile. Where we need a true digestive agent, however, for all portions of the alimentary canal we have it in the vegetable pepsin called papoid. This article is derived from the *Carica Papaya* and is free from the objections found in the animal product and possesses many advantages over the latter. It has been truly said that it is the only agent that acts upon all kinds of food, under all conditions, and throughout the entire digestive tract.

Dr. Frank Woodbury, Professor of Clinical Medicine in the Medico-Chirurgical College of Philadelphia, gives an interesting article on this new remedy in the *New York Medical Journal*, from which we take the following : Dr. Woodbury says that the action of papoid as a digestive agent has been thoroughly established. It acts upon albuminoids, converting them ultimately into peptones. It converts starch with great promptness, the

ultimate product being maltose. It emulsifies fats. It has a direct tonic action upon the stomach, stimulating the secretion of the gastric juice. It is distinctly antiseptic in its action, preventing abnormal fermentative processes in the stomach and intestines. It acts at all temperatures, and in either an acid, alkaline or neutral solution. It is freely soluble and is most active when in concentrated form. It has no action on living tissues and is positively innocuous when swallowed in any quantity likely to be administered.

Dr. Woodbury placed portions of bread, meat, potatoes, peas, mince pie, "and other substantials," in a large test-tube and added some papoid and bicarbonate of sodium, with a small amount of water. "The meat rapidly softened, and the other ingredients gradually disintegrated, forming a pultaceous mass."

Active out-door exercise should be insisted upon; the bowels should be kept regulated by simple doses of aloes, cascara, colocynth, etc., either singly or in proper combinations, while the general system should be strengthened with iron, bitter tonics and strychnia.

CARDIALGIA, Gastrodynia and Pyrosis are simply variations of dyspepsia in its multitude of forms. The same general line of treatment is applicable and we need only say for gastralgia that cocaine, essence of peppermint, soda-mint, or any of the carminatives would afford relief in any usual and ordinary pain. The water-brash would require the use of a mild astringent, such as kramaria, ammonia, ferric alum, red-oak bark or sumac.

CHOLERA MORBUS.

This condition is induced by errors of diet, sudden atmospheric changes, or depressing causes acting upon the patient.

SYMPTOMS.—It commences with sudden vomiting or purging. At first the contents of the stomach are ejected; then we have mucus; later, bilious matter, and lastly, a frothy serous matter is with difficulty ejected. The purging is usually very copious and the later discharges from the bowels are altogether serous. There are violent cramps in the stomach, intense nausea and colliquative sweating. The skin becomes cold, clammy and pinched, and the patient very often gets into a state of complete collapse, resembling Asiatic cholera. We would recognize this disease by the vomiting, cramps and purging.

TREATMENT.—The offending matters should be speedily cleared out of the stomach by a prompt emetic, and especially out of the alimentary tract. It would be well, also, to use a cathartic of calomel or soda and capsicum. The pain should be relieved by morphine, hypodermically injected, or small doses of laudanum or cocaine. The incessant vomiting and nausea will be controlled by morphine, hydrocyanic acid, cocaine, soda-mint or lime water. Pieces of cracked ice dissolved in the mouth will often allay this intense nausea. Both for the relief of the pain and nausea, warm stimulating applications in the shape of poultices or plasters of mustard, cloves, pounded mint, etc., can be used to great advantage, and they should be kept over the entire chest, stomach and abdomen. Where there is a tendency to collapse we may administer brandy, digitalis, strychnia or strophanthus. Where the vomiting is intractable, one-half grain doses of calomel with bismuth administered every half hour have been very effectual. Drop doses of laudanum, repeated every fifteen minutes, may be mentioned as an old, but quite an effectual remedy, also, for this distressing complication.

CHOLERA INFANTUM.

This trouble is mainly confined to children between one and two years of age, and is dependent upon certain disturbances of digestion and rise of atmospheric temperature. It has been observed that the trouble comes on with the advent of sudden and severe hot weather and its subjects are children mostly in the transition stage between the mother's breast and the shift for other food upon which they are trying to subsist in the absence of enough good quality breast-milk. At this time with the depression from intense heat, and usually a *moist vaporous* condition of the atmosphere added thereto, these children are seized with this dangerous and alarming disease.

SYMPTOMATOLOGY.—The disease may commence gradually as an ordinary summer diarrhœa with some gastric disturbance, nausea, and anorexia, and finally increase in severity until we have a condition of absolute rebellion of the stomach for all articles of food, frequent and copious colorless evacuations, great thirst, fever, head symptoms and death. On the other hand we have seen its onset resembling the cyclone in suddenness and fatality. A child apparently well and playful may in a few moments turn deathly pale, vomit a little half digested milk in a pint of fluid, at the same time one immense evacuation of colorless non-fæcal water from the bowel may occur. There will be no pain, no fever or other special symptoms, and a little color may return to the cheeks of the little one; it may even attempt to play for a moment or two, but in less than five or ten minutes this same vomiting and purging will again occur and will increase in frequency and severity until death closes the scene. Very often the disease shades off from an acute

condition into a very chronic and obstinate form of infantile gastro-enteritis in which these little sufferers linger for months.

CAUSES.—While we know very little of the exact nature or definite pathology of this trouble, we can easily see that the whole nutritive apparatus is affected, and while we can trace its onset to undigested or partially poisonous remnants of digestion which have either disturbed the system by absorption or reflex irritation, it is apparent to the observer that the whole ganglionic nervous system is profoundly impressed. Under this local and general disturbance we find nutrition arrested and the contents of the alimentary canal producing reflex effects; the circulation becomes interfered with in a most serious manner, and we have intense internal congestion, with later on, cardiac failure and cerebral disturbances and impairment of action from deficiency in quality and quantity of blood supplied.

TREATMENT.—The indications immediately urgent are to restore the circulation at once, correct and eliminate the offending materials in the alimentary canal, regulate the secretions of liver and digestive tract, and sustain the system during the trying ordeal.

An immediate use of the hot bath will often help the circulation greatly. Correctives come in well. Calomel and magnesia or soda—one-half to one grain—on a little crushed ice every half hour until the stools change consistency and color, indicating action from liver. We give calomel here both for its effect upon the liver and for its antiseptic properties. Where it can be obtained fresh, I have great faith in the use of medicinal peroxide of hydrogen (Marchand's) in these cases until the fermentative and poisonous products of digestion can be over-

come and the canal rendered aseptic. A large spice poultice or mint poultice should be placed over the child's abdomen to favor a better circulation and to aid in allaying nausea and vomiting. Lime water and iced milk, cracked ice, brandy and water, mint tea cold, and similar articles may be used as the symptoms demand. Later on, as the immediate danger passes off, if diarrhœa continues, we should resort to the general measures for improving digestion, restoring tone to the nervous system, and checking the wasting discharges from the bowel. It will be proper to select a good grade of milk, or easily digested foods with but little sugar and starch. The milk may be peptonized before giving it, or mixed with lime water. Some excellent prepared foods are upon the market in which a very near approach to mother's milk is reached. We would recommend some of these where it is difficult to get a first-class article of cow's milk and when the mother's supply is deficient in quantity and quality. The various astringents, opiates, etc., may be used with these little patients; but the great reliance after the acute attack has passed, is in proper feeding with the purest articles of food suitable to their ages and needs, the careful protection from changes of temperature, and good pure country air. Here the dietary and hygienic conditions count far above all other considerations.

DIARRHOEA.

The acute forms of this disease are induced by various errors of diet, dampness or irritating causes.

SYMPTOMS.—Gripping pains in the abdomen, tenderness, frequent watery stools, coated tongue and occasional fever. It may pass off in a few hours or days, or it may run into a chronic condition.

TREATMENT.—It is well usually to give a gentle laxative or mild cathartic, which will unload the liver, correct the secretions and carry off offending material. If the case is seen early, we may give simple doses of castor oil, with some carminative, or preferably, fair doses of calomel, soda and Dover's powders. Later on we should give opiates or astringents in moderate degree and place the patient upon a diet of boiled milk, rice, toast, etc.

Where the disease does not yield to this treatment, preparations of mineral acids with paregoric, bismuth with opium, rhatany, tannin, etc., may be used. It is very necessary to render the contents of the bowels un-irritating to the mucous membrane, and for this purpose, the food should be of the blandest character, and all acidity should be corrected by the use of lime water and other antacids. The application of a good flannel bandage around the abdomen will be found very often a valuable adjuvant.

In the chronic form of this disease, in addition to the remedies mentioned above, we would oft-times find benefit in the use of astringent enemas, such as acetate of lead with tannin, sesqui-chloride of iron, sulphate of copper or nitrate of silver. A most efficient combination is a chalk mixture with tincture of catechu and opium, and also a decoction of logwood with lime water, or aromatic sulphuric acid with laudanum. The same care in diet and in protecting the patient from changes of temperature should be observed even more rigidly in the chronic form of the disease.

DUODENITIS.

This is a catarrhal inflammation of the duodenum. It is dependent upon exposure to cold, errors in diet and other depressing agencies. There is usually a great dis-

tention of the stomach and intestines by gases resulting from fermentative processes. There is pain which comes on a few hours after eating and is intense and horribly depressing, inducing, oft-times, a spasm at the pylorus, ending in the vomiting of the entire contents of the stomach and regurgitation of the bile into the stomach, thereby greatly increasing the nausea and pain. There is usually continued tenderness over the entire region of the stomach, constipation, loathing of food, coated tongue and frequently jaundice.

TREATMENT.—It is absolutely important to withhold all sugars and starches here. At first, there should be only such food allowed as skimmed milk or lime water, with a little pepsin or papoid. In an acute attack, the intense pain may be relieved by the use of cocaine, given internally, or morphia, hypodermically injected. Alkaline draughts should be administered to relieve acidity, to wash out the accumulated mucus and to restore the liver to its proper action. If the pain is not very intense, belladonna or hyoscyamus would be preferable to opium. The various alkaline waters are valuable and especially those containing phosphate of sodium. The practitioner will derive immense benefit from the use of repeated blisters over the duodenum in this condition. By restricting the diet, as we have mentioned above, absolutely to milk at first, and then gradually allowing only oysters, white fish or game, with absolutely no white bread, potatoes or other starchy compounds, we may expect the best results.

ENTERITIS.

This is an inflammation of the mucous membrane of the bowel, extending to all of the other coats. It is gen-

erally caused by exposure, mechanical irritation, indigestible foods, etc. This condition is known as intestinal catarrh, and may, like the other forms of mucous trouble, be either acute or chronic. The acute stage is ushered in with violent cramps in the abdomen; intense pain, especially around the umbilicus; nausea, vomiting, high fever and quick, tense pulse. The bowels are usually constipated at first; this is followed by diarrhœa, and finally with muco-serous discharges, scant in quantity and painful upon movement. We will find the tongue red, furred and a tendency to become dry; the appetite poor and thirst considerable. The inflammation may involve only a portion of the bowel, or it may extend through the entire tract. In the more chronic forms we have symptoms similar to that of chronic diarrhœa, with liquid, pale stools and sometimes with considerable mucus, tinged with blood, giving the appearance of **chronic dysentery**.

The diagnosis is made by recognizing the marked fever, local tenderness and griping pains in the bowel, throbbing of the abdominal vessels and constipation, followed by diarrhœa.

TREATMENT.—The diet must be of the simplest character. The patient made to keep in a recumbent posture and the bowel put in splints, as it were, by commanding doses of opium, warm counter-irritation externally, turpentine stupes, occasionally leeches, dry cups, blisters, etc. Hot spice poultices are very grateful later on, unless their weight is objectionable to the patient. If there is a known irritating cause for this condition, it is proper to remove it by gentle aperient measures as early as possible. For this purpose, a dose of castor oil, guarded with a little laudanum, will be found valuable. It may

be necessary in the acute form to make use of minute doses of mercurials at first, following with castor oil. As soon as the offending matters have been removed from the bowel, we should rely upon limiting the diet to the smallest quantity and the simplest character. Bismuth, soda and Dover's powders make an excellent combination for protecting the bowel and allaying the pain. When the inflammation comes from positive obstruction to the bowel, we should avoid giving purgatives in any shape, controlling the pain and relaxing the spasms with opiates and supporting the patient by nutritive enemas.

The chronic form will require the same care in dieting the patient; a milder form of constant counter-irritation over the abdomen and more decided astringent remedies. Bismuth and Dover's powders in good size doses will be required; lime water and laudanum, emulsions of turpentine and lime water, nitrate of silver and a number of the more common vegetable astringents may be used to advantage.

DYSENTERY—Inflammation of the Large Intestine.

This is an inflammation of the descending portion of the large intestine, usually catarrhal in character, though it may be ulcerative and gangrenous. It is often epidemic and seems to be due to atmospheric changes, cold or damp surroundings and sometimes to errors in diet. It has been observed as a sequel to malarial trouble. The pathological condition in dysentery exists in a swollen, red and thickened mucous membrane, in which the secretion is at first arrested, and then increased, and finally becomes muco-purulent. The engorgement of

the vessels is intense and they often rupture, leaving ecchymosed, ulcerous spots.

SYMPTOMS.—There is usually a reasonable amount of fever present, pain, tenesmus with a constant desire to go to stool. The passages are mucous, purulent and bloody. There is very little fecal matter, though there is a constant effort to move on the part of the bowel, and very often marked constipation exists. Later on we have diarrhoea. We also have a good deal of disturbance of the stomach and bladder from sympathetic or reflex irritation. During the acute stage, the temperature is high, running from 102° to 103° or 104° and corresponding fever exists. There is great thirst and tenderness over the bowel on pressure. The patient is greatly disturbed by the accumulation of gases in the bowel, which increases the desire for movement. The disease ordinarily lasts from three to six or eight days for the acute form.

TREATMENT.—The diet in this, as in other affections of the stomach and bowels, should always consist of bland and unirritating substances, such as boiled milk, grated toast, rice and light broths. Moderate counter-irritation should be applied. If this trouble results from constipation, or the liver is at fault, we should administer mild doses of mercurials, with opium and belladonna. A very favorite prescription is the administration of table-spoonful doses of epsom salts, with about the same quantity of paregoric every two or three hours. The main object of the physician will be to clear out offending matters, regulate the secretions, allay the pain and make use of astringents and anodynes. The condition of the skin should not be neglected, and a combination of ipecac, quinine and opium will often prove of great service. Among other remedies may be mentioned tan-

nin, rhatany, catechu, salol, bismuth and acetate of lead. In typhoid conditions the patient's strength must be kept up by the use of brandy, milk punches and a good concentrated diet. After the failure of the various remedies usually prescribed we have seen inveterate cases relieved by the use of simple enemas of cold water; washing out the bowels several times a day with ice water relieves tenesmus and gets rid of irritating mucus.

In the chronic form the line of treatment laid down above will apply fully. We will have to use also the more decided astringents and a long continued course of dietetics will be necessary, consisting mainly of milk, rice, soft boiled eggs, corn starch or arrow-root. Very little bread should be allowed, and this should be subjected to great heat. The mineral acids, sulphate of copper, sulphate of zinc, nitrate of silver combined with opium and ergotole are indicated. Where we suspect ulcerations, iron, ergotole and turpentine are valuable. Suppositories of opium, hyoscyamus and cocaine are all indicated, as well as the various injections of silver, tannin, etc. Small blisters frequently applied over the region of tenderness are also of unquestioned value in this trouble.

TYPHLOITIS.

This is an acute or chronic inflammation of the caecum or ascending colon and frequently of the vermiform appendix. This latter inflammation is known as Appendicitis.

Peri-typhlitis is an acute inflammation external to the caecum and in the surrounding connecting tissue, usually ending in the formation of pus and giving all the symptoms of an ordinary abscess of large size. Both forms present the appearance and symptoms of localized peri-

tonitis, with fever and evidence of intestinal obstruction.

SYMPTOMS.—We have in typhlitis local pain, with extreme tenderness over the right iliac fossa, with swelling and distention from gases. The patient lies in an attitude to relax the muscles; there may be constipation or diarrhœa, or the two conditions may alternate. The stools are generally watery and small, consisting of serous discharges finding their way through hardened masses of fecal matter. The fever is generally high, and constitutional disturbance is considerable. There will be found vomiting in the majority of cases and if the obstruction to the bowel is complete the vomiting will become stercoraceous. Where the obstruction is not relieved, or continues for a long time, we are likely to have ulcerations and perforations, giving rise to general peritonitis, which usually ends fatally.

In the external form or peri-typhlitis we have the pain developed slowly, with an enlarged mass in the right iliac fossa, usually ending in early suppuration, when the tumor becomes soft and fluctuant. With the suppurative process, we have fever, chills and hectic sweating.

CAUSES.—Both of these conditions are due in many instances to the lodgment of foreign substances at the vermiform appendix, or at other points in the caecum or ascending colon. Very often large quantities of fruit seeds, bundles of worms, or chalk stones are responsible for this condition. More often the condition results from the lodgment of hardened and impacted faeces—and lastly from traumatisms or exposure to cold.

DIAGNOSIS.—This trouble should be diagnosed from the symptoms we have just given, though we should be guarded, as we have to decide frequently between aneur-

isms, tumors and malignant growths. Usually, however, the history of the case and the prominent symptoms of fever, pain, tenderness and enlargement in the right iliac fossa, with the alternating diarrhoea and constipation, should enable us to arrive at the proper diagnosis.

TREATMENT.—The diet should be restricted to liquids given in small and repeated quantities ; the patient should be placed absolutely at rest in bed, and if in the earlier stages of inflammation, leeches and ice bags should be used over the spot. The bowels should be kept absolutely quiet, and paroxysms of pain relieved by the free use of opium, hyoscyamus and belladonna. Gentle purgatives, to favor the softening or removal of these masses from the bowel, should be cautiously administered. We have excellent results from the use of the mild salines, with the addition of small quantities of belladonna to relax spasm and favor peristalsis. Where the patient does not object to it, or can be induced to take it without great difficulty, there is no remedy equal to castor oil, turpentine and paregoric. Where the obstruction continues unrelieved, or where we have ulceration of the bowel, with perforation, the surgical procedure of laparotomy is demanded and should be promptly undertaken.

In the external form or peri-typhlitis we may try the use of a blister and later on, poultices. When it is positive that pus has formed, the patient should be placed upon a supportive diet, with quinine, brandy and other stimulants, and the abscess freely opened and drained.

INTUSSUSCEPTION—Invagination, or Obstruction of the Bowel.

This condition may result from a number of causes, such as impaction, products of inflammation, presence

of foreign bodies and twisting or invagination of the bowel.

SYMPTOMS.—From whatever cause it may proceed, we have a constant set of symptoms which may be mentioned in the following order :

Complete constipation, continued vomiting, finally reaching stercoraceous matter ; great prostration, frequent, small pulse, coldness of the skin and collapse. Upon local examination we are apt to find hardness and swelling at certain portions of the intestinal tract, with pain and gaseous distention.

TREATMENT.—As soon as we find that the case is one of intussusception, we should by all means avoid purgatives of every kind. We are compelled to rely entirely upon the efforts of nature with the relaxing effects of opium. In this condition we find belladonna of especial value, though we have been gratified in using a combination of belladonna and hyoscyamus in fair doses frequently repeated. Large, warm water enemata used with care, are often of great value, though force should not be used. Aspiration has been practised with fair success, both for removing large, gaseous accumulations and for inflating the bowel in the hope of removing the constriction or the invagination.

Where all other remedies fail, the abdomen should be opened promptly and without fear, and the patient be given a chance for his life before he is allowed to get into a state of collapse and die on account of timidity or indecision on the part of the medical man. In such cases as this, surgery becomes a sheet-anchor and offers the most tempting results.

HAEMATEMESIS—Haemorrhage from the Stomach.

SYMPTOMS.—Of course the prominent symptom is the vomiting of blood, which may, on the contrary, be passed by way of the bowel. Usually the haemorrhage in the stomach takes place slowly, and the blood is thrown up in the shape of blackened coffee grounds, as it were; sometimes as good sized clots. When the blood is thrown up in large quantities of bright red color, it indicates that one or more blood vessels have given away suddenly. Haemorrhage from the stomach is indicated usually by nausea, which is one of the first symptoms. There is a faintness and a feeling of weight and oppression in the stomach, with cold, clammy skin and symptoms of shock. These symptoms are usually relieved when the contents of the stomach are vomited. We find the food mixed with blood when vomited up in this condition.

DIAGNOSIS.—The fact that the blood is usually mixed with food, is vomited, is generally black, and presenting the appearance of coffee grounds, and frequently black tarry stools, would fully complete the diagnosis. We need not confound this condition with haemorrhage from the lungs, for in the latter case, the blood is usually coughed up as a bright red, and frothy substance, unmixed with food.

TREATMENT.—Absolute rest, cold water, cracked ice, tannic or gallic acid, sulphuric acid, turpentine, ergotole, etc, are the remedies. To quiet the tumultuous circulation of the heart and the excitement of the patient, prussic acid, morphine or bromide of potassium may be given. If the bleeding continues after the usual remedies are tried, ergotole, hypodermically injected is highly recommended.

COLIC.

SYMPTOMS.—The general symptoms of this trouble are twisting and griping pains around the umbilicus, unaccompanied by any fever, and occurring in paroxysms of **varying severity.**

It is frequently due to flatulence, irritating secretions within the bowel, errors in diet, poison, and lastly to constipation. It passes away for a time, leaving the patient with a feeling of soreness and depression, but is apt to recur again and again, until the conditions producing it are removed. The immediate symptoms are vomiting, which is very frequent, and always violent, spasmodic pain of a peculiar twisting character. There is a marked depression, in which the extremities become cold, with a clammy sweat, and great anxiety on the part of the patient to be relieved. Other symptoms vary with the different character of the colic which may present itself; for example, where it results from constipation, we have the history of this condition sometime ahead, with disordered digestion, gradually culminating in an attack.

In other forms from poisonous metals we may have what is commonly known as copper colic, lead colic, etc. We would distinguish these latter affections by the peculiar symptoms of poisoning from the above metals.

TREATMENT.—Warmth, externally applied, anodynes and carminatives, at first. For the simpler conditions: hot water, hot soda water used internally; hot poultices, ginger tea, fennel seed tea, weak mint juleps, Hoffman's anodyne, compound spirits of lavender, etc. In severer cases we may administer laudanum, morphine or chloroform to relieve the pain and relax the spasm. As soon as possible the alimentary canal should be relieved of all offending matters, and for this purpose calomel and soda,

or turpentine and castor oil, with a little laudanum and large warm water enemas may be used. For the general relief of spasm, pain, etc. belladonna is especially indicated, and not only for simple colic, but for that of metallic origin.

In copper colic we generally find violent inflammation of the intestinal canal and our treatment should be based upon this knowledge. Regulation of the diet, with the use of bismuth, opium, and an occasional light mercurial would cover the ground.

In lead colic we have violent constipation to overcome and small doses of opium will be found of great advantage. This may be aided by the use of calomel and large injections of warm water, while diluted sulphuric acid, for its antidotal purposes, may be used continuously. In obstinate constipation croton oil in minute doses is recommended, as well as strychnia, iodide of potassium and atropine.

CONSTIPATION.

This annoying and general trouble is due to a variety of causes. Especially do we find it in dyspeptic persons of feeble nervous and muscular powers and those leading sedentary lives.

SYMPTOMS.—It is hardly necessary to give symptoms of constipation ; still, besides the knowledge that it does exist, we have certain very disagreeable symptoms dependent entirely upon this condition, such as general lassitude, headache, vertigo, disturbed sleep and a distended or weighty feeling in the abdomen.

TREATMENT.—In general terms—by exercise, diet and lastly, drugs. The diet should be nutritious and consist of articles not likely to form gases, and sufficiently

stimulating to the coats of the stomach or bowel to favor the formation of mucus and peristaltic action. Cooked fruits, graham bread, corn bread, warm drinks and soups are of service. Great quantities of sweet milk should be avoided. Where there is atony of the bowel from over-distention from gases or from want of nervous power, the diet should be regulated accordingly, and belladonna strychnia and the phosphates should be administered. Where there is want of secretion, colocynth, rhubarb, aloes and belladonna are all indicated.

Alkaline mineral waters frequently have their value, and massage and electricity often do much good as well as the various gymnastic exercises.

Probably one of the most important measures for overcoming this condition, as an adjuvant to what we have already mentioned, will be the formation of a regular daily habit by the patient, and for this purpose the patient should try to educate the bowel to make an effort at about the same hour every day.

Of course, in the beginning of the treatment the use of calomel, enemata and mercurials may be all called for to clear out the offending matter and to restore the secretions before commencing a uniform course of treatment.

MUGUET OR THRUSH.

This is an affection almost entirely associated with infancy. There are a number of small, white patches which form within the mouth, soon coalescing, and forming patches of white, curdlike exudation. The mouth is found to be hot, and there is frequently a slight fever and a disordered stomach, or diarrhoea associated with this condition. The attack usually lasts from one to several weeks. It is supposed that this trouble is due to some parasite.

TREATMENT.—Mouth washes of flax-seed tea and gum arabic, borax and glycerine, boracic acid, solutions of alum water, weak muriatic acid with honey and water are all recommended for local use. Much faith has been placed in the use of chlorate of potassa, and this may be given in solutions with glycerine for a child of from two to three years of age in doses of from three to five grains several times a day. The general health of the child must be kept up as far as possible and carefully considered in the treatment of this trouble, as in all others, and where exercise and an improved dietary is indicated, it should be attended to carefully.

GLOSSITIS.

This is an inflammation of the tongue proper, characterized by pain and enlargement of the organ, with much difficulty in articulating, chewing, or swallowing food, etc. The cause of the trouble is usually of an irritant or mechanical nature.

SYMPTOMS.—The prominent symptoms are fever, great congestion or redness of the organ with swelling, and rapid pulse; the mouth then becomes hot, the pain is considerable and the secretions of the mouth are greatly increased.

In the chronic form the inflammation is usually confined to the end or edges of the tongue.

TREATMENT.—If from vitiated secretions or mechanical irritants such as broken teeth, the cause should be removed, when a cure usually follows. In the acute form the patient should be placed upon a fever diet, with febrifuge drinks. Aconite, veratrum viride or prussic acid may be used to control the circulation. Incision into the tongue should be freely made if the swelling is very

great. Cracked ice will be found grateful, and frequent use of very hot water later on. In the event of threatened suffocation, laryngo-tracheotomy should be performed promptly.

STRICTURE OF THE OESOPHAGUS.

This consists essentially in a narrowing or constriction of the oesophagus at some point. It may be either spasmodic or organic. In the spasmodic form we find it occurring mostly in hysterical women or nervous men.

SYMPTOMS.—There is difficulty in swallowing food of any kind, especially solids. The spasm is not constant, but should swallowing be attempted during the spasm, the face becomes livid and the patient presents symptoms of imminent suffocation.

DIAGNOSIS.—An oesophageal bougie will readily pass into the stomach, where the trouble is of the spasmodic variety, and should it be arrested, the spasm can easily be overcome.

TREATMENT.—The patient should be reassured and an effort made to let him understand that the condition is only temporary. The bougie should be passed every day; bromide of potassium and other nerve sedatives should be administered and the general system improved by the use of tonics, exercise and electric treatment.

In the organic variety, which may be the result of injuries or acrid poisons, or the results of inflammation from other causes, the bougie will be arrested at the site of constriction, and it may be with great difficulty that the smallest one can be passed. It will be almost impossible for the patient to swallow solids of any kind. We should diagnose this form from cancer and aneurism.

In cancer we have severe pain, hæmorrhages, and the general cancerous cachexia with a continued increase in the stricture in spite of treatment. In aneurism we may detect the bruit and other conditions.

TREATMENT.—When the stricture follows inflammation, we must gradually dilate with bougies up to a considerable size. The electrical treatment by electrolysis is worthy of trial in every instance where this severe trouble occurs.

DILATATION OF THE STOMACH.

This may be due to cancer, to organic obstruction at the pylorus, or to atony of the muscular coats, with deficient nerve power.

SYMPTOMS.—The patient presents general dyspeptic symptoms. There is great distention of the stomach, and percussion causes a general tympanitic sound. There are frequent eructations and vomitings of partly digested food, some of which may have remained in the stomach for days. The patient suffers very much from many sympathetic disturbances due to pressure on the surrounding tissues and organs by the greatly distended stomach.

TREATMENT.—The patient should live on small quantities of solid, nutritious food, and should be given nuxvomica or strychnia, massage and electricity over the stomach, and some anti-ferment after each meal. Change of habits and abundant exercise will be of service.

INFLAMMATION OF SEROUS MEMBRANES.

There are some common symptoms in all inflammations of the serous membranes wherever found in the

body. The inflammation is usually of high grade, accompanied with severe pain, quick, tense pulse, high fever and a tendency on the part of the membrane itself to serous effusions, becoming rapidly organizable in the form of fibrinous bands and attachments, rapid pouring out of serum, causing local dropsies, and the speedy formation of pus in great quantities.

MENINGITIS.

This is, properly speaking, an inflammation of the meninges of the brain. The usual form seen, when not dependent upon traumatism, is that of the pia mater and arachnoid, and this condition is almost always associated with a limited cerebritis, so that in speaking of meningitis, we really mean meningo-cerebritis. The consequent symptoms are always those of both troubles.

SYMPTOMS.—We have great excitement, often culminating in maniacal or furious delirium, severe headache, intense intolerance of noise or light, flushed and injected countenance, the carotid arteries pulsating with great force and frequency. We also find fever, vomiting and other symptoms of cerebral disturbances. The patient generally passes from these symptoms into a state of drowsiness, general hebetude, rapid and feeble pulse, spasmodic twitching of the muscles, hemiplegia and coma.

TREATMENT.—Cold applications to the head, such as iced cloths, the ice bag, evaporating lotions, stimulating mustard foot baths, local abstraction of blood by way of leeches or cups, general counter-irritation, active purgation with saline cathartics; subsequently minute doses of mercurials, bromide of potassium, ergotole and arterial sedatives, such as aconite and prussic acid. The head

may be shaved and a fly blister used to great advantage in many instances.

PLEURITIS—Inflammation of the Pleura.

SYMPTOMS.—This disease is ushered in with a chill, sharp lancinating pain in the chest, which increases in severity greatly during inspiration, cutting short the patient's breath and making respiration both painful and superficial. Usually there is a dry, short cough, with high fever. The ear applied to the chest at this time will detect, in addition to these symptoms, a dry friction sound. With the subsidence of these acute symptoms to a certain extent a change occurs very often in a few hours. We have the usual effusion to occur, which by its pressure compresses and limits the action of the lung and oft-times bulges the inter-costal spaces. When this fluid has been absorbed, the lung gradually resumes its functions, though, there may be dulness for some time.

TREATMENT.—Our object is to cut short the disease at the earliest possible moment, so as to prevent serious after-consequences. At first we should give a prompt cathartic, with opium and bromide of potassium for relief of pain, and to quiet the circulation, aconite or veratrum viride. In plethoric subjects, the prompt use of the lancet is of inestimable value. Locally we may make use of fomentations, turpentine stupes, cups, leeches and general counter-irritation. If the stage of effusion has occurred the hydrogogue cathartics such as elaterium, scammony, etc., must be used, and the diuretics such as potassa, digitalis, and squills; and in addition thereto, diaphoretics such as jaborandi, etc. Should the disease become chronic, it will be necessary to place the patient upon a generous diet with alcoholic stimulants.

In cases of suppurative pleuritis or severe hydrothorax, it is proper to evacuate the matter to prevent compression of the lung in the first instance and severe and prolonged hectic in the other.

PNEUMO-THORAX.

This is a condition in which there is movement of atmospheric air in the pleural cavity, and is the result of injury to the lung, or sometimes a perforation from tubercular disease into the pleura.

SYMPTOMS.—In this condition we, of course, find liquids and air in the pleural cavity. The most prominent symptom of this condition would be the amphoric breathing and voice, and a tinkling, splashing sound upon palpation.

TREATMENT.—We must resort to opiates and warm, soothing applications to the chest, with a generous diet, tonics, alcoholics and readily assimilated foods. To relieve impending dyspnoea we should resort promptly to aspiration or puncture.

PERICARDITIS.

This is an inflammation of the serous covering of the heart, sometimes due to injuries ; more frequently found in subjects affected with pleurisy, rheumatism and Bright's disease.

SYMPTOMS.—Increased action of the heart, quick, vibrating pulse, want of appetite, debilitated condition, some fever, usually more or less pain in the region of the heart, with a dry, fretful cough. A very valuable diagnostic sign would be the cardiac friction sound or murmur. This is caused by friction of the pericardial sur-

faces before effusion occurs and is only obtained in the earlier stages of the disease.

TREATMENT.—We should quiet the action of the heart with aconite or prussic acid ; relieve the pain with opiates, local counter-irritation in the shape of blisters, cups, leeches ; acting upon the skin and kidneys with mild mercurials, squills and digitalis ; and support the patient when necessary with a generous diet.

PERITONITIS.

This is an inflammation of the serous membrane lining the abdominal cavity and is due to a number of causes such as external injuries, perforation of the intestines, or the discharge of pus into the peritoneal cavity. When this condition follows the accidents of child-birth, it is known as puerperal or child-bed fever. In the acute stage there is severe pain, high fever, great tenderness over the abdomen, with tympanitic distention. The pulse is corded rapid and hard ; the facial expression is peculiar, being haggard, pinched and anxious. The position of the patient is also characteristic ; the limbs are flexed upon the abdomen, and every effort is made even to prevent the weight of the bed clothing upon the abdomen.

TREATMENT.—Prompt counter-irritation, and local or general abstraction of blood if necessary ; control of the circulation with arterial sedatives, and an absolute control of pain with full doses of opiates.

DISEASES OF THE LIVER.

CONGESTION OF THE LIVER.

This is usually a transient affection, the result of exposure to cold, the improper use of alcoholics, or other errors in diet.

SYMPTOMS.—There is a sense of weight in the right hypochondrium, loss of appetite, a bitter taste in the mouth, headache and occasional nausea and vomiting.

TREATMENT.—Usually a brisk, saline cathartic followed if necessary, by a light mercurial, and proper regulation of the diet, will effect a cure. We have a frequent and chronic form of congestion, due very often to heart trouble or obstruction to the circulation. This condition must be treated on general principles; the cause, as far as possible, must be removed, and the general circulation improved by proper diet, clothing and drugs.

HEPATITIS—Inflammation of the Liver.

SYMPTOMS.—There is great pain and tenderness in the region of the liver, high fever, with evening exacerbations and morning remissions. We have constipation, clay colored stools, which are sometimes black. There is occasional icterus, and frequent and irregular perspirations. This may end in resolution and recovery, or in the formation of abscesses.

TREATMENT.—We may resort to local abstraction of blood, counter-irritation, aided by the internal administration of mercurial or saline purges. The diet should be light and plain and restricted in quantity. Alkaline diuretics and mineral waters may be given. If the trouble is due to malarial origin, quinine will be found advantageous. In the chronic form of this disease, the treatment required will be about the same as that of chronic congestion of the liver.

CATARRH OF THE BILE DUCTS.

This is an inflammation of the common duct, extending to the smaller ones, and to the substance of the liver. It

is frequently known as catarrhal jaundice, and is due more generally to an extension of inflammation from the duodenum.

SYMPTOMS.—It occurs suddenly after a few days of trouble about the stomach and bowel. There is a decided jaundice, with great tenderness and swelling over the liver and stomach, clay colored stools, nausea, vomiting, sluggish pulse and great itching of the surface.

DIAGNOSIS.—We would recognize this condition by the preceding gastric troubles, with swelling of liver, and jaundice.

TREATMENT.—Act on the skin and kidneys with the usual diuretics and diaphoretics. Locally, leeches, dry cups and especially blisters, do much good. The diet should be restricted to the simplest liquids. The portal circulation should be relieved by the use of very mild mercurials, though the salines are better. The remedy of all others in this condition is the phosphate of sodium. The patient may be given sixty grain doses of this several times a day. Where the disease is persistent and shows a tendency to chronicity, chloride of ammonium, iodide of potassium or corrosive sublimate should be used.

ICTERUS—Jaundice.

This is simple jaundice and is in itself a symptom, rather than a disease. It is often due to some obstruction of the bile ducts, gall-stones, plugs of mucus, or to catarrhal inflammation. It may be due also to disordered conditions of the blood, as in malarial or yellow fever; or to a disordered liver, as in atrophy or fatty degeneration. We have known violent anger or great mental emotion to produce intense jaundice.

SYMPTOMS.—Almost anyone should detect jaundice by the yellow skin, conjunctiva, clay colored stools, and urine almost like porter. In addition to these symptoms, the patient almost always complains of being absolutely miserable and utterly worthless. After a few days the itching of the skin becomes intense and intolerable.

TREATMENT.—The skin should be acted upon by diaphoretics, the kidney should also be acted upon and the circulation through the liver regulated as far as possible by purgatives. The salines, and especially the phosphate of sodium are of great service. The mercurials come in well and are absolutely necessary in some conditions. The diet should consist of plain and digestible food, with buttermilk, acid fruits, etc. For the intense itching of the skin, a warm water bath, rendered thoroughly alkaline with bicarbonate of sodium, is of much service.

GALL-STONES.

This painful and distressing condition is characterized by an intense pain in the epigastric or right hypochondriac region, and it occurs from time to time in violent paroxysms. The vomiting and retching in this trouble are severe and we usually find the patient deeply jaundiced in a few hours. These stones are usually passed into the bowel within a few hours, or as many days, though their passage may be prolonged for as many months.

TREATMENT.—Hot hip baths, warm applications in the shape of poultices or fomentations, morphia hypodermically injected with atropia or belladonna, if necessary, and the inhalation of chloroform to relieve pain and relax the spasm. Large draughts of hot alkaline waters are commonly supposed to facilitate the passage of the stone. Phosphate of sodium is highly efficacious here. Many prac-

tioners rely upon giving large doses of sweet oil, and look upon it as being a panacea in these terrible attacks. To prevent the recurrence of gall-stones and to favor their disintegration when formed, much reliance has been placed upon the use of turpentine, upon the various alkaline waters and sweet oil. From ten to twenty drops of chloroform well diluted, three times a day may be given for this purpose. Durand's remedy consists of three parts of ether to one part of turpentine, and may be given in doses of from ten to twenty drops, three times a day on an empty stomach. The diet and exercise of the patient are of the utmost importance; he should avoid much sweet or fatty food, and the skin and kidneys should be kept active, with an abundance of out-door exercise.

ABSCESS OF THE LIVER.

SYMPTOMS.—The symptoms of this disease are usually not well marked and are generally of a very diverse character at first, consisting of a slight discoloration of the skin, with some lassitude, disturbed digestion and marked melancholy or depression of the spirits. As the abscess develops more or increases in size, we have chills and fever, nausea and vomiting, clay colored stools, poor appetite, high colored urine, tenderness and swelling over the region of the liver and finally a fluctuation.

TREATMENT.—As soon as pus is discovered, it should be evacuated promptly, either by aspiration or incision. The patient's general health must be strictly looked after. Good food, tonics and stimulants should be made use of, with the mineral acids, and especially quinine.

YELLOW ATROPHY OF THE LIVER.

This is a diffuse inflammation of the parenchyma of the

whole organ which rapidly diminishes in size. It is usually accompanied with enlargement of the spleen and attended by hæmorrhage and symptoms of uræmic poison. This disease generally develops quickly and unfortunately ends, in the majority of cases, in convulsions or death. It is very often seen in pregnant women, and sometimes follows grave surgical operations. It begins with gastric disturbances, jaundice or more or less fever. This jaundice deepens with sluggish pulse and intense headache, followed by convulsions, coma and death.

TREATMENT.—All our efforts are usually without avail. Active purgation may be tried and the mineral waters and phosphorus have been recommended.

FATTY DEGENERATION.

This is a condition in which there is gradual degeneration of structure by fatty infiltration throughout its tissue.

It is caused by improper eating, especially of rich foods and by systemic diseases, such as cancer, consumption, etc.

SYMPTOMS.—The patient has a pale, sallow complexion ; the fats and starches seem to disagree and the stools are usually discolored, owing to the presence of altered bile. The area of percussion dulness is greatly increased over the liver.

TREATMENT.—The patient's diet should be limited, fats and starches entirely excluded, and proper exercise enjoined. The various salines, such as sulphate of magnesia, phosphate of sodium, or Vichy water will be found of service. The action of the skin should not be neglected in this condition.

CIRRHOSIS—Interstitial Fibral Hepatitis.

This is a diffuse form of chronic, interstitial inflammation leading to a contraction of the organ and an interference in the portal circulation, producing passive congestion. In this condition we will find ascites, jaundice and splenic enlargement.

SYMPTOMS.—Probably the first symptoms noticed will be those of ascites, which will be strengthened by the discovery of the diminished size of the organ, with the high colored appearance of the urine which is usually loaded with an abundance of blood pigment. This is usually due to over-indulgence in alcoholic liquors and is commonly known as gin liver.

TREATMENT.—If we could see the patient before contraction took place, we would make use of the usual treatment for congestion or inflammation. After the contraction has set in, corrosive sublimate, alternating with iodide of potassium, may be tried. Throughout we should act upon the portal circulation, and upon the skin and kidneys with diaphoretics, quinine, digitalis, etc. The diet should be regulated and all alcoholic liquors avoided. Where the dropsy is troublesome, paracentesis should be practised.

CANCER OF THE LIVER.

This is a very common affection, and may be either primary or secondary to other cancerous troubles. It is more common in women than in men and is not usually seen until after middle life. It is very often the seat of metastatic cancer.

SYMPTOMS.—Disturbance of digestion from interference with the portal circulation, more or less jaundice when

there is pressure upon the ducts. Dropsy is usually slight unless the vena cava or portal vein is obstructed by pressure. The urine is high colored, containing leucin and tyrosin. There is pain and tenderness at various points over the region of the liver and nodosities may be detected here and there. There is a little fever, but as the disease progresses the patient presents the peculiar cachectic, cancerous appearance.

DIAGNOSIS.—This will depend upon the local pain and tenderness, enlarged liver, irregular, nodulated surface, the usual absence of fever and marked cachexia.

TREATMENT.—The treatment is usually unsatisfactory and of course, is only palliative. The hypophosphites have been much lauded, while arsenic and corrosive sublimate are still popular remedies for retarding the progress of the disease. Externally plasters of belladonna, conium, or hyoscyamus may be worn to relieve tenderness and retard growth. Whenever the pain is intense, it may be relieved with morphia, cocaine, or other opiates.

HYDATID CYST.

This is rather a rare affection in this country. There is very little pain, fever or other constitutional disturbances.

As the cyst grows, it gradually projects forward from under the ribs and gives rise to a jelly-like vibration upon percussion. The morbid anatomy consists in the simple cyst of the liver due to the egg of the tape-worm from dogs, which are supposed to enter the body with our food, travelling through the portal vein to the liver and there becoming encysted. The hooklets of these eggs are found in the cyst, which contains, besides, a large quantity of gelatinous fluid.

PROGNOSIS—Fairly good, recovery frequently occurring. The bile very often kills these eggs and the cysts may be shriveled up or be discharged into the intestines, or externally.

TREATMENT.—Glycerine is often administered, under the belief that it abstracts fluid from the cyst and thus causes it to disappear. The sodium salts are also recommended. The most radical treatment is by the surgical method which consists in aspirating these cysts and injecting iodine into them. There is some risk of inducing hepatitis by this method, but the remedy, nevertheless, is one to be heartily commended. The electrolytic current is also an agent likely to accomplish much good in this trouble.

DISEASES OF THE HEART AND AORTA.

PERICARDITIS.

This being an affection of the serous membranes, is treated of elsewhere in this book. See "Inflammation of the Serous Membranes."

ENDOCARDITIS.

This is an inflammation of the membrane lining the cavities of the heart, and is very often associated with Bright's disease and rheumatism.

SYMPTOMS.—Palpitation, in which the action of the heart is greatly out of proportion to the force of the pulse beat. The pain over the heart is dull, not sharp and lancinating like that in pericarditis.

TREATMENT.—We must use prompt counter-irritation over the region of the heart, light mercurials, salicylate of soda, with digitalis if necessary. If there is much ner-

vous excitability, bromide of potassium or chloral may be given.

VALVULAR DISEASE OF THE HEART.

Usually the mitral and aortic orifices are the seats of the trouble in valvular diseases. These conditions are generally due to endocarditis, in which there is contraction of the orifices or regurgitation due to valvular insufficiency. In time, this condition leads to hypertrophy and dilatation, and this is followed ultimately by general dropsy, beginning with anasarca of the lower limbs. In mitral lesions, with hypertrophy, there is difficulty of breathing on exercise. This increases in proportion as the pulmonary circulation becomes obstructed, until finally the difficulty of breathing becomes habitual and the patient cannot lie down. Aortic lesions are manifested more by palpitation upon excitement or exercise, with the usual pain over the neighborhood of the heart. In mitral lesions we observe the systolic, or presystolic, murmur, which is heard best near the apex beat; while the systolic murmur from aortic lesions is most distinct at the base of the heart. We have other murmurs due to anaemia, which must not be confounded with these conditions.

TREATMENT.—Our effort will be to relieve pulmonary congestions, quiet and regulate the action of the heart, the beating of which is tumultuous, and strengthen the muscular action of the organ, thus preventing further hypertrophy. The patient should be well nourished, and digitalis should be given where the heart's action is very irregular and feeble; strophanthus is also highly lauded. If the heart's action is rapid, but not weakened by dilatation, aconite comes in well. For general dropsical ef-

fusions, hydrogogue cathartics are indicated. There should be counter-irritation to the chest, belladonna plasters over the praecordium, nux vomica should be given, also caffeine. General anaemia should be treated also, as some of this trouble may be functional.

HYPERTROPHY AND DILATATION.

Both of these conditions are so nearly allied or interdependent that we cannot discuss one without considering both. In hypertrophy we have an abnormal increase of the muscular tissue of the organ itself, and where the cavities of the heart are not enlarged it is known as simple hypertrophy. If the cavities are enlarged, it is then known as eccentric hypertrophy. In dilatation we have enlargement of the cavities and at the same time the muscular walls may be thickened or thinned, constituting hypertrophic or atrophic conditions. These conditions of hypertrophy and dilatation may be due to violent muscular exercise, excitement or other strains upon the heart itself. Various obstructions to the flow of blood through the organ would give rise to it.

TREATMENT.—We must control the excessive action of the heart with prussic acid, aconite, veratrum viride. According to the weakness of the muscular action, we will be called upon to use digitalis, strychnia or strophanthus, as may be required. When this condition arises from other obstructive causes, we should endeavor to remove them or compensate for the same as far as possible. The diet should be plain and unstimulating, and yet, nutritious ; the exercise moderate and reasonable.

FATTY DEGENERATION.

As in other tissues, we have here a loss of muscular tissues and the substitution of fat cells.

SYMPTOMS.—The patient is generally exhausted upon slight exercise, the heart is weak and the circulation is sluggish and wavering. There is shortness of breath from slight exertion, sighing, panting respiration, with intermittent pulse at times. The brain suffers from want of blood supply as the heart runs down. We may have vertigo and even slight epileptiform seizures.

TREATMENT.—The first thing is to rest the organ. Fats should be avoided, but a sufficient amount of animal food should be given. Undue exercise and mental worry must be prevented and the patient should be given tonics, a reasonable amount of wine or whiskey, strychnia, convallaria and caffeine or other heart tonics.

CARDIAC EXHAUSTION.

What we have said of the treatment for fatty heart will well apply to conditions of cardiac exhaustion, with the exception that our active agents may be more freely used and, in addition to the remedies mentioned, we would suggest brandy, digitalis, strophanthus, and strychnia in large doses.

PALPITATION.

This is a very distressing condition, due very often to sympathetic disturbances, such as dyspeptic troubles, mental emotions or other nervous affections, but more generally due to anaemia.

TREATMENT.—Where it is from plethora or errors of diet, and the habit is full, we would relieve the portal circulation as well as the general circulation by purges of aloes, mercurials, colocynth, or some of the saline group. Where it is due to menstrual disturbance, this condition should be corrected; and especially do we need the min-

eral acids, iron tonics and dioviurnia, brandy, strophanthus, etc. When due to general nervous disturbances, we would find the various anti-spasmodics such as musk, valerian, assafoetidae, Hoffman's anodyne, cocaine, etc., of much service.

ANEURISMS OF AORTA.

The majority of the aneurisms of the thoracic aorta occur usually somewhere in the arch. We can always find physical signs in abundance when the cardiac two-thirds of the arch is the seat of the trouble. A local bulging will be seen, in which one rib, or an inter-costal space, seems to be pushed forward. We get a distinct pulsation from this enlargement, which is different from that of the heart. Upon auscultation, we get a very perceptible whirr or thrill, or even a musical sound sometimes.

DIAGNOSIS.—The diagnosis of this trouble is easily made when the disease is advanced. In aneurism of the abdominal portion we may have deep-seated and severe pain in the back and abdomen, and resistance to all treatment; later on muscular spasm of the lower limbs, frequent displacement of the liver or other viscera. We may be apt to confound this condition with aortic pulsation, or with neuralgia or rheumatism of the bowels.

DIAGNOSIS.—The true diagnostic points would be the discovery of a pulsating tumor, which would be strengthened by the additional localized *bruit* heard along the course of the spine.

TREATMENT.—The treatment of both forms of these aneurisms is practically no treatment at all. The patient must be made to assume the recumbent posture as much as possible and remain so for a long time, trusting to a

narrowing of the sac and the filling up of its cavity with fibrinous material, by thus reducing the force of the current of blood. The recumbent posture for many months, and years even, with large doses of iodide of potassium, seems to have given very favorable results; and now and then, a cure. The amount of fluid taken should be limited, and everything done to lessen arterial volume and pressure.

DISEASES OF THE BRAIN AND SPINAL CORD.

CONGESTION OF THE BRAIN.

This may be active or passive, due in the first instance, to the excess of arterial blood from increased action of the heart, paralysis of the vasomotor nerves, etc.

In the passive form, there is an excess of venous blood produced by impediments to return, such as tumors, aneurisms, etc.

SYMPTOMS.—We have headache, fullness and weight, flushed face, great heat of head and face, photophobia, vertigo, ringing in the ears, sleeplessness, etc. Where this hyperaemia is intense, we may have violent throbbing of the carotids, mental confusion, delirium and convulsions. The symptoms of the passive form would be turgid veins of the head and face, intellectual dulness and hebetude, with more or less cyanosis.

TREATMENT.—Cold applications to the head should be used. In the acute form, cardiac sedatives, aconite, prussic acid and veratrum viride are indicated. If necessary the blood must be abstracted with the lancet; locally, cups and leeches to the nucha and temples, hot pediluvia, and active saline purgation aided by enemata are all recommended. For immediate reduction of cir-

culatation in the brain, bromide of potassium, chloral and ergotole are all of value. In the passive form, the remedy would be the removal of the cause.

ANÆMIA.

This means, of course, a deficiency of blood to the brain, and is due to congestions in remote organs, vasomotor disturbances, heart failure, excessive debility and sudden loss of blood.

SYMPTOMS.—The sensation of faintness or actual fainting, vertigo, ringing in the ears, blindness, weak, feeble pulse, sighing respiration, together with sleeplessness, etc.

TREATMENT.—When the trouble comes from sudden loss of blood, the recumbent posture must be assumed and alcoholic stimulants administered, aided by digitalis, strophanthus, strychnia and caffeine. Where it is of the chronic character, the condition must be remedied by the use of stimulating and nutritious diet, with alcoholic stimulants, tonics and reconstructives.

CEREBRITIS.

(See Meningitis.)

EMBOLISM.

This is an occlusion of some of the cerebral vessels by the lodging of an embolus or clot. Such a condition may result from the whipping off of fibrinous shreds from the valves of the heart, or from clots found elsewhere in the circulation and carried along, these clots finally reaching a vessel through which they cannot pass.

SYMPTOMS.—Due very much to the location of the clot

or embolus and to the amount of brain tissue deprived of blood. Usually, these symptoms are sudden vertigo and headache, mental confusion, the speech mumbling and imperfect, frequent vomiting, with hemiplegia or some other form of paralysis. The patient frequently presents all the symptoms of apoplexy, falling suddenly with unconsciousness.

PROGNOSIS.—The prognosis should be guarded, as patients are frequently restored to perfect health, though there are many chances for hemiplegia to become permanent, chronic enfeeblement of mind, or cerebral softening to a limited extent.

TREATMENT.—If we find the heart failing, as we usually will, it must be sustained by hypodermic injections of strychnia, digitalis or ammonia. We may often need alcoholic stimulants, and we should by no means use depressing treatment in any such case. The patient should be placed on a light, nutritious diet and kept in a state of perfect rest, with the bowels moderately open but not actively purged; and after a few days we may resort to the use of iodide of potassium to favor the absorption of the clot.

APOPLEXY.

This is due to sudden haemorrhage of the blood vessel within the brain. There is of course, extravasation, producing pressure and causing sudden unconsciousness, stertorous breathing, with a complete relaxation of the muscular system, reduction of temperature and a slow, uncertain pulse. It seems to be somewhat hereditary, occurring usually after middle life and seems to be produced by mental worry, full feeding, or sudden arterial

excitement. Its immediate cause is due to arterial degeneration.

SYMPTOMS.—Occasionally we have prodromic symptoms, such as headache, vertigo, a tingling sensation in the extremities, numbness, mental confusion and a feeling of impending danger some days before the actual haemorrhage occurs. Usually, however, these prodromic symptoms are lacking, and the patient is taken entirely unawares. In the sudden attack we have symptoms which we have described before, and in addition, the face is usually flushed and turgid with blood, the pupils are sluggish, and they may be contracted or dilated with entire muscular relaxation. Unless the patient dies in a state of coma, we have then about twenty-four hours as a period in which reaction may take place, during which there is a rapid rise in the temperature, with returning evidences of consciousness and a condition of hemiplegia which is very apparent. With this rise of temperature, due to an inflammatory condition around the clot, there may be tonic contraction of the paralyzed muscles and severe neuralgic pains.

PROGNOSIS—If the temperature begins to rise very early and there are signs of returning consciousness, the prognosis is favorable so far as the present attack may be concerned. It is unfavorable where the heart shows failure and irregular action, or where there is great contraction of the pupils, and convulsions. Where sensation returns to the paralyzed parts and within the first week there begins to be some motion, the case is favorable. If no improvement takes place in the paralyzed parts for two or three weeks, we will have a tedious case, with the probability of no recovery.

TREATMENT.—If we have prodromic symptoms and they are noticed by the practitioner, and if the patient is plethoric he should be bled and purged promptly. If we fear to take so much blood, we may cup and leech locally, and administer large doses of bromide of potassium, ergotole or chloral. If seen after the attack has occurred or during the attack, and the face is turgid, with good strong pulse, the propriety of bleeding should then be considered, especially local depletion by cups and leeches. The patient should be freely purged at this stage and for this purpose we may use croton oil if we have difficulty in administering other remedies. A drop or two of croton oil rubbed on the back of the tongue will answer, if the patient has even lost the power to swallow. Turpentine enemata and hot mustard foot baths are valuable adjuvants. If reaction has been established, it will be our duty to control the circulation with aconite, prussic acid, veratrum viride, bromide of potassium, chloral or ergotole.

Leeches may also be used if necessary, behind the ears, in case the temperature continues very high. After the reactionary stage has subsided to some extent and the temperature has become somewhat normal, the patient should be kept at perfect rest in every way and free from noise, excitement or mental activity. His diet should be plain and simple, the bowels should simply act reasonably, and full doses of iodide of potassium should be given to hasten the absorption of the clot. For the paralysis, after the inflammatory symptoms have passed, we may institute massage, electricity, and passive motion; strychnia may be administered internally.

CEREBRAL SOFTENING.

This trouble may be either acute or chronic in character. It usually results from embolism or thrombosis, the exten-

sion of inflammation from contiguous parts, from syphilis, from great exhaustion or other excesses.

SYMPTOMS.—In the acute form we have headache usually accompanied by fever, vomiting and convulsions. There is also delirium, some forms of paralysis limited to certain muscles, impairment of the mental faculties and difficulties of speech. In the chronic form there is gradual mental decay, impaired memory, headache, vertigo, debility and disordered nervous sensations, together with symptoms of hyperaesthesia and anaesthesia, aphasia and slight paralysis or palsy.

TREATMENT.—We can do practically very little in the line of treatment for these people. In the acute form, we must treat the hemiplegia, aphasia and other symptoms purely on general principles; while in the chronic form, chloride of gold, phosphorus and other tonics are supposed to retard the progress of the disease. Really, our chief care will be to prolong life and to make our patients as comfortable as possible, and this may be done by strict attention to the ordinary hygienic and dietetic rules of life.

ABSCESS OF THE BRAIN.

This condition results from injuries, the extension of inflammation from disease of the middle ear, from disease of the cranial bones or from apoplexy, embolism and other similar troubles.

SYMPTOMS.—We have violent headache, vomiting and mental hebetude. We even find coma, stupor, irregular rise in the temperature, chills and palsies. The diagnosis of this trouble is difficult, though it may be made out by taking in all the symptoms and noticing what area of the

brain would govern the paralyzed muscles. In this way we can sometimes locate the seat of the trouble.

PROGNOSIS.—Very unfavorable.

TREATMENT.—Where the condition is due to traumatism, or to diseased conditions of the bone, the pus should be evacuated by the use of the trephine, otherwise we must relieve the pain with morphia, cocaine and other anodynes. The strength of the patient should be sustained and he should be kept perfectly quiet while waiting for nature to help us out.

CEREBRAL SYPHILIS.

This may be due to gummatous deposits, giving rise to symptoms of meningitis or encephalitis. These syphilitic tumors may occlude blood vessels, thus cutting off nutrition and function, or they may press down upon the brain substance here and there, giving us all the symptoms of abscess or tumors.

DIAGNOSIS.—Diagnosing from the history of the patient as regards his having been the subject of syphilitic trouble; and especially should this condition supervene within twelve or eighteen months after the appearance of chancre we might strongly suspect the presence of a syphilitic tumor. The diagnosis would be materially aided by the result of a few weeks of tentative treatment.

TREATMENT.—Essentially that for syphilis. The patient should be saturated with iodide of potassium and this method of treatment should be alternated with mercury from time to time, also arsenic and the vegetable alteratives. Nutritious diet, general tonics and comfortable clothing should always be considered in our special treatment.

SPINAL CONGESTION.

This congestion of the spinal cord may be either active or passive, and is due very often to exposure to cold, injuries, malaria, excessive sexual indulgence and alcoholism.

SYMPTOMS.—A dull, tired pain in the back, which is usually increased by pressure, disturbed sensation in the limbs, numbness, tingling and sometimes weakness in the legs. This condition is often increased upon lying down.

PROGNOSIS.—Usually favorable.

TREATMENT.—Counter-irritation along the spine, local depletion, sometimes by cups or leeches, and complete rest for the patient. Where there is active hyperaemia of the cord, chloral, bromide of potassium, ergotole and belladonna will aid in relieving this condition. The bowels should be kept moderately active with saline purgatives or an occasional aloetic purge, if necessary.

SPINAL ANAEMIA.

This, of course, is the reverse of spinal congestion, though in many forms the symptoms and effects are quite similar. We should diagnose the anaemia from the history of the patient, the general want of tone about the system—pallor and weakness—and the fact that the erect posture aggravates the trouble.

TREATMENT.—We should treat this condition very much as we should that of passive hyperaemia, a subject which we have reserved in order to describe it along with this treatment. Here we must give the patient rest, we should avoid active depletion, and we should administer digitalis, tonics, and just enough mild counter-irrita-

tion to improve the circulation. Frictions up and down the spine morning and evening, general massage, electricity, warm clothing, nutritious diet and moderate exercise are the best remedies for this trouble.

SPINAL MENINGITIS.

This is a common inflammation of the arachnoid and pia mater, which is sometimes called lepto-meningitis. This is a true inflammation caused by exposure, traumatism, rheumatism, phlebitis, extension of inflammation and other causes. It follows the course of other inflammations, having at first intense hyperaemia or congestion followed by exudation of lymph and the formation of fibrinous bands here and there.

SYMPTOMS.—There is pain and tenderness along the spine, which is increased by motion or pressure. The patient lies absolutely still to avoid any undue pain from motion. We have the various symptoms of disturbed spinal functions, such as girdle pain around the waist or abdomen, hyperaesthesia, muscular spasms, etc. There is a moderate amount of fever present in the earlier stages of the disease, and if the trouble continues and progresses, we have disturbance of function in organs supplied by spinal nerves from the parts affected.

TREATMENT.—Very much that which we have described for congestion. The patient should be confined absolutely to bed; cups, leeches and counter-irritation down the spine, and the spinal depletants must be administered internally. All these remedies we have mentioned heretofore. After the acute stage has subsided we may resort to light mercurials, or rather mercury, in minute quantities for its constitutional effect and for the purpose of hastening absorption and preventing the

organization of lymph. Iodide of potassium is also highly recommended to hasten absorption, while in the more aggravated or chronic forms, the galvanic cautery, blisters and iodine are suggested.

PACHYMEINGITIS.

This is an inflammation of the dura mater of the spinal cord. It is due very much to the same causes that produce the other forms of meningitis.

SYMPTOMS.—The symptoms advance gradually, among which we may have chills, fever and severe pain. We may also have anaesthesia or hyperaesthesia, with shooting pains along the nerves coming from the diseased parts. The muscles supplied by these nerves undergo frequent contractions which are spastic in character. There are various other reflex conditions noticed, such as wandering pains in the chest, abdomen and limbs, with gastralgia, vomiting and other reflex disturbances.

DIAGNOSIS.—We should diagnose this condition from that of ordinary inflammation of the meninges by the character of the pains, which are severe; by the muscular contractions and the marked fever.

TREATMENT.—On general principles we should place the patient at perfect rest in the recumbent posture, which should be changed from time to time. Counter-irritation along the spine and especially dry cupping should be tried. As the disease advances a little and with the subsidence of acute symptoms, we may resort to blisters here and there; also, iodine, iodide of potassium, mercury and electricity.

MYELITIS.

This is an inflammation of the cord itself, and is pro-

duced by the same causes which induce meningitis. The symptoms are the same as those of meningitis, only more intense in character. Of course, as the disease advances and the integrity of the cord is destroyed, besides the muscular contraction and anaesthesia mentioned before, we have paralysis and complete anaesthesia. The reflexes are all lost, the rectum and bladder being beyond the control of the patient, and bed sores and sloughs occurring on various parts of the body below the diseased portion of the cord.

TREATMENT.—In the earlier stages, we should proceed just as we would treat meningitis, with local abstraction of blood, counter-irritants, purgatives, depletants for the cord, and later on we should depend especially upon the most improved diet, iodide of potassium, tonic doses of corrosive sublimate, iodide of iron, cod-liver oil, etc.

POLIOMYELITIS.

The acute form of this affection, known as infantile paralysis, is an inflammation in the ganglion cells of the anterior horns of the gray matter of the cord, which preside over the nutrition and motion of the parts to which their nerves are distributed. This affection is almost entirely confined to children of from three to six years of age and may be due to many causes, especially to cold, exposure, metastasis of exanthematous diseases, dentition and other less frequent causes.

SYMPTOMS.—It usually begins with a mild attack of fever, which lasts three or four days. The child complains of headache, vertigo and symptoms of nausea, and there may be a slight convulsion or two. Within a week or ten days there will be found paralysis of one or both sides of the upper or lower extremity. We have

usually found it to be one of the lower limbs, which in a very short time becomes utterly useless. The peculiarity about this form of paralysis is the rapid wasting of the muscles of the limbs which quickly shrink away and feel soft and flabby. There is very little reaction to the stimulus of electricity, nor is there any pain in the limb.

PROGNOSIS—The prognosis is rather favorable, though the disease is usually very tedious.

TREATMENT.—We should use in the earlier stages, as we should in most of the other spinal affections of an inflammatory character, leeches, counter-irritation, cups, bromide of potassium, ergotole; and later on, the iodides with tonics. The bowels must not be allowed to remain constipated during the course of the disease. The hard fight and real treatment is the subsequent management or relief of the deformities and paralysis. Treatment will sometimes be required for years, and the child should be placed in the very best possible hygienic condition. He should be comfortably clad, well fed, and be given sufficient sunshine and moderate exercise, to assure assimilation. Cod-liver oil, phosphorus and iron are all indicated. Passive motion should be practised, massage and electricity should be made use of; and this line of treatment should be faithfully persevered in until an absolute cure has been effected.

CHRONIC POLIOMYELITIS—Progressive Muscular Atrophy.

This disease comes on between twenty-five and forty years of age, and is due to exposure, injury, mental and physical depressing causes, and sometimes to syphilis. The muscles under the microscope, are seen to have degenerated, as well as the peripheral nerve fibres. This

degeneration extends to the spinal cord to a certain degree.

SYMPTOMS.—The attack commences frequently in the arm, with an aching pain, and we soon afterwards notice a wasting of the muscular tissue, with loss of power. This spreads to other muscles of the arm and shoulder and often to the other arm. This condition may continue until it affects the muscles of the back, the muscles of respiration, and indeed, the entire muscular system. The reflex responses are weakened and there are very poor responses to the electric current. A peculiar feature is muscular irritability or fibrillation, occurring over these fibres when they are lightly struck.

In addition to these symptoms, we have a reasonable amount of pain, rheumatic in character, in the beginning of this trouble, which may be accompanied by numbness, tingling, etc. The disease progresses steadily, though it may seem to be temporarily arrested from time to time, the patient finally dying from pulmonary trouble or from paralysis of the muscles of deglutition or respiration.

TREATMENT.—We should rest the body and mind. The patient must be placed in the best hygienic conditions possible, and the general alteratives or reconstructive remedies used. Massage, electricity, arsenic, and strychnia are all recommended, though none have ever proved of any special service.

SCLEROSIS.

This is an interstitial inflammation of the cord in which there is a deposit of connective tissue, producing atrophy of the nerve structure itself. It may attack the anterior or anterolateral columns or the posterior columns. It may disseminate throughout the entire cord and so reach the

brain. It comes on usually after middle age, and is said to be due to syphilis, exposure, cold, excessive venery, traumatisms, etc., though we really know nothing about the cause of it. The disease spreads in the longitudinal direction, and the cord becomes atrophied and indurated.

SYMPTOMS.—In the anterolateral variety, we have jerking and twitching of the muscles, with spasms or stiffness, followed by entire loss of motion of the lower extremities. The patient's gait is peculiar—he seems to walk on his toes, bending his body forward, and has a tendency to lose his equilibrium. Sensation and reflexes are preserved. In the posterior form known as locomotor ataxia, we have a gradual advance of the disease, in which there are lightning like pains down the limbs. The sensation is very much impaired, especially that of contact, the patient often feeling as if he were stepping on pillows, or that he cannot feel the floor properly with his feet. As the disease progresses there is entire abolition of the sensation of the feet and lower limbs. An essential symptom is want of coordination in muscular movements, the patient cannot walk in a straight line : he cannot close his eyes, and walk or stand erect. Often there are girdle pains, which are very distressing, around the whole body. We have also what is known as multiple sclerosis, which gives all the symptoms of both of the forms already described, as well as of brain trouble.

PROGNOSIS.—In all cases unfavorable, the disease having a constant tendency to gradual progression and death.

TREATMENT.—Of late years much good has been done by treatment. Now and then cures are reported and it is well worthy the attention of the physician to study these closely and to give them careful thought, as we will fre-

quently be very much surprised at the results of persistent, scientific treatment. The patient should be placed absolutely at rest, so far as undue exercise or mental worry are concerned. The diet should always be nutritious and easily digestible. We should use very gentle counter-irritation (we prefer iodine) up and down the spine. The internal administration of corrosive sublimate in tonic doses has proven of great service. The chloride of gold and sodium has also been favorably mentioned. Of late years much has been claimed for a species of mechanical treatment, which consists in stretching the spine by swinging the patient by an apparatus somewhat like Sayre's jury mast. It is claimed that very satisfactory results have been obtained temporarily by this method and it would be well to give it a trial. The moderate application of electricity, especially in the form of the faradic current to the muscles and the galvanic current to the spinal column itself, has at times afforded relief to these agonizing pains. The lightning like pains must be relieved by the use of appropriate anodynes, opium being reserved for the last.

Hyoseyamus, for muscular tremor in the disseminated form, is one of the best agents we know of.

PARALYSIS AGITANS.

This is known as palsy and is a disease of the nervous system, seen oftener among women than men. There is constant trembling of the body which may be confined to the limbs generally, or to the head and certain limbs, though universal trembling is the rule. The pathology of this trouble is but poorly understood.

SYMPTOMS.—As we have stated, the general muscular trembling is the prominent symptom, and this condition

obtains though the patient may be lying quietly in bed. It affects the entire body, and in this respect differs from spinal sclerosis.

The speech is free and without scanning. As in anterolateral sclerosis, the patient walks somewhat on tiptoe, with the head and body usually bent forward and a slight push would throw him off his equilibrium. The disease seems to be progressive and there is finally loss of power and entire paralysis.

TREATMENT.—Here, as in other forms of nervous diseases, the patient must have rest, and such food and hygiene as will be favorable to the building up of the nervous system. Phosphorus, arsenic, cod-liver oil and the various hypophosphites are all indicated. A special preparation spoken of elsewhere in this work as "neurosine," has been very highly recommended. The nutrition of the muscles must be kept up by massage; the application of the faradic current and the use of friction must also be borne in mind. To relieve and control the trembling, strychnia, electricity and hyoscyamine are especially useful.

GENERAL NERVOUS DISORDERS.

Apart from well marked and special diseases of certain portions of the nervous system proper, we have our most frequent, distressing, and unmanageable cases in the form of general affections of the entire system. The more prominent forms thus encountered are Neurasthenia, Epilepsy, Hysteria, Chorea and General Neuralgia. They all seem to be dependent to some extent upon certain general conditions in which the system is depressed and below the standard of health. At the same time we may often find a local cause which is

operating to further depress and keep up this systemic condition. Besides these general symptoms each affection has its own peculiar symptoms sufficiently well marked to allow us to arrive at a diagnosis and institute special treatment along with the general course indicated for them all.

NEURASTHENIA.

This is another trouble which has been, by some of our very observing writers, appropriately termed the "American Nervous Disease" and is, in our experience, the outcome of the worry of business and rush after wealth in this fast age of ours. Of course, poverty, want, trouble and other depressing causes, as sexual excesses, inebriety and the like are prolific causes of this trouble. The literal name of this disease would be Nerve Exhaustion, and indeed the condition is one of prostration of the whole nervous system with attendant disturbances of the digestive organs, and general irritability of mind and body.

SYMPTOMS.—The symptoms of neurasthenia are of the most widely divergent character, showing a profound depression of the mental and physical powers. The patient is irritable, fretful, unhappy and dissatisfied with himself generally. It is a labor for him to tax his mind or body with any kind of task which must be performed. While the mind and intellectual faculties are perfect, yet they speedily become tired and refuse to respond to the demands made upon them. There is forgetfulness, sleeplessness, indigestion and restlessness. Great indecision of character marks the individual in the smallest affairs of ordinary business. The patient is weak, anaemic, low spirited, always tired and the subject of all

manner of aches, pains and morbid fears. The limbs are weak, tremulous and easily benumbed by slight pressure on the nerves. There are palpitations of the heart, sudden perspirations and other evidences of general depression. In the female many of the symptoms are augmented by the additional reflexes from the uterus. In a number of cases we find neurasthenia as a sequel of immoderate use of alcohol, opium, chloral, cocaine and other remedies of this class.

TREATMENT.—If any local or special cause can be found for this condition it should be attended to at once.

The next important step is to secure absolute freedom for the patient from all business worry, care and bother. He will need rest in the true sense of the word and he should have all the possible advantages of recreation, change of scene and surroundings and pleasant associations. His diet should be simple and nutritious from the first and gradually brought up to a full and highly concentrated course, rich in material for building up the blood and the nervous structures. At first we should give rich milk and plain bread, following on after the usual general irritability of the system has subsided, with rice, soft boiled eggs, white fish, oysters and finally reaching the full meal of beef, mutton, game, and vegetables. As soon as the system is in a condition to use them advantageously, the wines, ales or porters may be freely allowed when indicated. Much harm is done by the effort of the physician to build up the patient too fast and before the system is prepared for this forced feeding. It is therefore of equal importance with full feeding that the patient be carefully prepared beforehand, or else there is danger of serious consequences to the patient from this sudden overcharging of the system with irritating ingesta.

Massage, electricity, exercise of the entire muscular system, either actively or in shape of passive motion is of great value. Tonics of all kinds are indicated, especially iron, arsenic, strychnia, the phosphates and the usual vegetable bitters. The various tonic and sedative narcotics are very often called for to relieve the melancholia, insomnia or extreme nervous excitability of these cases. Often it is absolutely necessary to thus control the highly irritable condition of the nervous system by an appropriate special line of these drugs before we can put the patient upon any improved course of alimentary article or more direct tonics. Where such conditions exist we have in a preparation called Neurosine, one of the most valuable and effective neurotics within the reach of the physician. This preparation is put up by a St. Louis firm of chemists and presented to the profession in an open handed, scientific and strictly professional manner. It affords us pleasure to introduce such an excellent remedy as we have found in neurosine and at the same time to know that we can do so without helping on a secret proprietary compound. The formula of this valuable preparation is freely given to the profession and is as follows: Each fluid-drachm contains five grains each of the C. P. bromides of potassium, sodium and ammonium; one-eighth grain of bromide of zinc, one sixty-fourth grain each pure extracts belladonna and cannabis indica, four grains extract lupuli, and five minims fluid extract cascara sagrada. This preparation is simply invaluable in the condition mentioned above and as it is of even more service in some of the affections yet to be described we have introduced its formula in this connection. In the entire treatment of a case of neurasthenia we must not lose sight of the fact that the tendency will be towards continual relapses and we must be ever on the lookout to en-

courage and cheer the patient until he has gained sufficient physical and mental strength to go on to a complete cure as time and faithful treatment will insure, remembering also that he needs all of his forces in this long fight and hence it will be hardly necessary for us to urge the physician to be careful *not to give too much physic*.

EPILEPSY.

This disease is marked by sudden loss of consciousness and convulsive seizures which pass off in a deep sleep. The trouble is a chronic one and the attacks recur at longer or shorter intervals. There are three varieties of the disease, known as *grand mal*, *petit mal* and Jacksonian epilepsy. In the first the attacks are complete and profound, the loss of consciousness being complete and the convulsions being general and severe. In the second variety there may be little or no loss of consciousness and the convulsive movements may be of the slightest kind, the patient simply appearing slightly confused for a few moments. In the Jacksonian variety there is no loss of consciousness and the convulsive seizure is confined to certain muscles or groups of muscles. This latter form is usually the result of disease of the cortical substance of the brain.

SYMPTOMS.—The prominent symptoms of epilepsy have been given with the above description, but there are a few special features which are associated with it and which further aid us in making out a diagnosis between it and some hysterical affections now and then simulating epilepsy. Besides the loss of consciousness and the convulsions in the major variety, there is usually a distinct *aura* or warning symptom just before the attack. This may be manifested in any kind of distur-

bance of sensation such as a feeling of distress about the stomach, simple heartburn, flashes of light before the eyes, noises in the ears, numbness in the limbs or some similar symptom. Very often the patient will describe this warning symptom as something that gradually rises up from the stomach to his head when he no longer retains consciousness. The patient will frequently give a sudden cry as of terror and fall over with a convulsion. The tongue is frequently bitten and the convulsions assume the tonic and subsequently the clonic form before the attack subsides. An attack may last for only a few minutes or it may be prolonged for hours. It usually passes off in a profound sleep and the patient emerges from it in a dazed and semi-confused state.

PROGNOSIS.—In all forms of epilepsy this is unfavorable, and much will depend upon the age and exciting cause producing the trouble. Where it occurs in children from errors of diet, teething or remediable diseases we may hope to cure it in a certain number of cases, but where no cause can be found and when it continues to recur at more frequent intervals the prospects of cure are very bad. The worst feature of this trouble is its tendency to produce mental impairment as it advances, though many epileptics are very intelligent people. The duration of the disease cannot be predicted as it is essentially one of extreme chronicity. It may not shorten life at all except through accidents occurring when the patient falls from loss of consciousness, when he may kill himself by blows on the head, or from falling into the fire or water.

TREATMENT.—Remove all exciting causes if such are to be found, and if it is impossible to assign a cause, then we should pay attention to every peculiar habit or

act of the patient, regulating the quantity and quality of food, seeing that all of the functions of the body are properly performed. If it proceeds from an irritated prepuce, an injury, tumors, or injuries to the brain, the surgeon will be able to do much for the case and should not hesitate to operate, as these cases are hopeless if left alone. The majority of these cases, however, are dependent upon some obscure general condition and require treatment from this point. Long experience has proven that the most uniformly successful remedies for improving and mitigating these epileptic seizures and insuring the longest possible intervals between attacks are the bromides of potassium, ammonium or sodium, either singly or better, combined. They should be pushed vigorously and continued in full doses until the reflex sensibility of the palate is abolished, as may be ascertained by tickling the palate with a feather without provoking any attempt at vomiting. They should still be continued after this but in smaller doses. All treatments should be continued for many months after all symptoms have been subdued. The dose of these bromides for an adult should range from a half drachm to a drachm at a time and may be required from one to three times a day. Thousands of other remedies are mentioned both by the profession and the laity for this distressing condition, but this multitude of drugs only shows how unsuccessful the general treatment has been with all of them. Among others specially mentioned are cannabis indica, chloral, nitro glycerine, and zinc. The combination referred to elsewhere in this book as Neurosine is one of the best preparations that can be given in this condition as it combines all of the bromides and the zinc together with mild narcotic sedatives.

HYSTERIA.

This is more generally looked upon as a reflex from the uterus rather than as a pure nervous disorder. In many cases the trouble can be traced directly to the uterus, but this is by no means the only source of the trouble as we have frequently seen unmistakable cases of hysteria in males. The majority of cases are seen in females and for this reason the cause is saddled upon the **unfortunate uterus**.

SYMPTOMS.—The attack may vary in severity from a simple fit of uncontrollable laughter or weeping to one resembling the most severe epileptic convulsion. It often comes on with a sensation of a ball rising in the throat (*globus hystericus*), a sense of constriction about the body, or other similar symptoms. A further peculiarity of the disease is in the simulation of so many other and grave diseases. We have seen it assume the *role* of aphonia, paralysis, brain diseases, amaurosis and all imaginable troubles. The phantom tumor is the most remarkable of these hysterical manifestations. It looks and feels like an abdominal tumor and may remain for a long time and then in an instant disappear. Generally in an attack the abdomen will become suddenly and enormously distended with gas but this is not the phantom tumor, which lasts and sometimes deceives the surgeon to the extent of making a fool of him. We have known of more than one instance where the surgeon has made all of his arrangements to remove a tumor, when it would remove itself much to the chagrin of the operator. These attacks consist of much weeping as a general rule, though we have seen patients in a most hilarious and happy mood; frequently they get into a state of catalepsy, or simulated coma. The attack us-

ually passes off with a good cry, an immense discharge of liquid urine, an emptying of the stomach or bowels or some other physiological act.

TREATMENT.—Functional disorders should be corrected and the general health improved by tonics, fresh air and good wholesome plain food. Abundance of exercise in the open air and sunshine is an excellent adjuvant to the treatment with drugs. The various antispasmodics and sedatives are indicated, such as musk, valerian, assafoetida, castor, the bromides, neurosine, shower bath, iron, cod-liver oil and electricity.

CHOREA—St. Vitus' Dance.

SYMPTOMS.—Incessant movements of the voluntary muscles in an irregular manner. There is no control over this condition of muscular movement or if so it is very little. The affection may be confined to certain muscles or groups of muscles or to the entire muscular system. Usually it is confined to certain groups. In bad cases patients cannot walk, or use the hands well enough to feed themselves; frequently speech is interfered with to a considerable extent and the constant movements of many muscles actually brings on positive fatigue and depression in severe cases. During sleep all of these movements are arrested and the patient is for the time relieved of the annoying and fatiguing affection. A certain degree of palpitation of the heart with cardiac murmur is frequently observed, probably due to the same irregular muscular action of the heart or its valves.

CAUSES.—Chorea is mostly seen in young people and children and in very nervous and weak adults. It is traceable to debility, fright, overwork, mental excitement, injuries, rheumatism and exposure.

PROGNOSIS.—This is always favorable in young people and also in all well managed and ordinary cases in adults. The duration of the disease is from four weeks to as many months.

TREATMENT.—Tonics, good diet, and healthy exercise with mild antispasmodic and sedative remedies. In mild cases light doses of the bromides, change of occupation or suspension of studies, improved nutrition and salt bathing will be all necessary. In more severe conditions iron, arsenic, strychnia, cod-liver oil and the hypophosphites of lime and soda may be tried, and in place of the bromides we can find a still more powerful combination in **neurosine**.

NEURALGIA.

The general form of neuralgia may invade any portion of the body supplied with nerves, hence we cannot exempt any muscle or organ from this painful and intractable neurosis.

SYMPTOMS.—Pain is the essential symptom of this affection. It is a pure nerve pain without heat, swelling or other symptom of inflammation. As far as we can ascertain this is a purely non-inflammatory trouble confined to the nerve itself. The pain is very acute, sudden and shooting and there may or may not be tenderness over the parts on pressure, except when there is a coexisting inflammation present. The affection may arise from anæmic and disordered conditions of the blood itself, from a diseased condition of the nerve centres, or from local affections of the nerve, as tumors, injuries and inflammation. Various forms of neuralgia are named from the special nerve affected or from the site of the pain; thus we have *tic douloureux* for facial neuralgia, *sciatica* for neu-

ralgia of the hip, *gastrodynia* for the pain when it affects the stomach, *hemicrania* for unilateral neuralgia of the head, *pleurodynia* for the side, and *angina pectoris* when the heart is affected with the sudden painful neuralgic seizures.

TREATMENT.—While the manifestations of neuralgia are local, it is evident that the general system is greatly at fault in a large number of cases, and it is important, therefore to attend to building up the system with generous diet, tonics, and placing the patient in a favorable general hygienic condition. Where the trouble can be traced to malarial influence, as it is very often found dependent upon this condition, the administration of quinine in full doses until the system is thoroughly impressed will afford the most satisfactory results. In these malarial cases it will always be found that the ferruginous preparations as well as the various bitter tonics, and the preparations of zinc, copper, and arsenic are valuable adjuncts. After paying attention to these general points in the treatment, we must then treat the special forms of the trouble as they arise. Pain must be combated with aconite, belladonna, conium, morphia, cocaine, chloroform, hyoscyamus, chloral and opium. Locally we must resort to liniments, blisters and counter-irritation. Hypodermics over the course of the nerve, acupuncture, electricity and the actual cautery are all to be relied upon in extreme cases. Where the trouble is found to be dependent upon some morbid growth or pressure upon the nerve it will be necessary to resort to surgery for relief.

It should be borne in mind that the general system in all cases of persistent neuralgia is apt to be greatly at fault and the prevention and cure of this terrible affliction will depend upon measures addressed to such condition.

For this purpose, in addition to the remedies named, we would speak further of cod-liver oil, phosphorus, the hypophosphites, and neurosine as being of inestimable value.

DISEASES OF THE RESPIRATORY SYSTEM.

LARYNGITIS—Inflammation of the Larynx.

SYMPTOMS.—Some difficulty or oppression in breathing, tickling in the throat, altered or abolished speech, hoarseness, dry cough, difficulty of swallowing and some fever. The condition is simply that of a common cold and lasts from a day or two to a week or longer for the acute variety. This dry and hoarse condition passes into that of free secretion and expectoration and the symptoms all abate and pass away in favorable cases. The inflammation sometimes passes down and ends in bronchitis, or the trouble may terminate in oedema of the glottis.

TREATMENT.—Place the patient upon a mild liquid diet and keep him in a room of equable temperature of about 68° with a certain amount of warm moisture in the atmosphere of the room. Cracked ice will be very comforting and beneficial to the patient, and a gentle purge if there is plethora, will be indicated. Inhalations of warm and soothing vapors are grateful, and especially those combining an astringent. Dover's powder and ipecac act very well in some cases. In severe cases where suffocation threatens from oedema of the glottis or continued spasm, tracheotomy must be performed. In the chronic form we will find syphilis or consumption usually present as the cause, and our treatment must be directed to the general condition of the patient as well as the local trouble. In addition to the symptoms of the acute variety, we will have pain, soreness and difficult deglutition. The

opiates and nervous sedatives must be used freely with inhalations of carbolic acid, turpentine, etc.

BRONCHITIS.

The various forms of bronchitis may be classified as acute, chronic, plastic and capillary. In the acute form there is catarrhal inflammation of the larger bronchial tubes. This is due to exposure to cold, certain general disorders of the system and metastasis from the exanthemata. In the plastic form there seems to be a fibrinous exudation in which there are actual casts of false membrane. Capillary bronchitis may be really termed a suffocative catarrh, in which the smaller bronchial tubes are affected with catarrhal inflammation, completely blocking them up and interfering with inspiration to such an extent, that we have collapse of certain portions of the lung. In children, or in very debilitated people, this is a very dangerous condition. The chronic form is also a catarrhal inflammation of the larger bronchial tubes, following an acute attack, which develops slowly and lasts nearly all the winter with a tendency to return with each advent of cold weather. The pathology is simple and is that of the acute disease, the difference being its excessively chronic character, and the fact that it does not seem to shorten life or impair the health very much.

SYMPTOMS.—The acute form begins with chill, and sometimes with a slight fever, with a harsh, dry cough, somewhat paroxysmal in character. The expectoration is mucous in character and slight in quantity and sometimes streaked with blood. There is some shortness of breath, occasional nausea, with headache, aching in the limbs and a general feeling of malaise. Later on, as the inflammatory symptoms somewhat abate, the cough be-

comes easier and the expectoration freer, in which the patient brings up pus or muco-pus; the fever gradually subsides and the cough lessens in the same way. Acute bronchitis usually lasts from ten to fifteen days. Upon auscultation, we find an almost natural vesicular murmur, the respiration is harsh from both lungs, and dry, sonorous râles may be heard throughout the chest. These râles in the second or full stage, give way to moist, bubbling râles.

PROGNOSIS.—Usually favorable, unless the disease should run into capillary bronchitis or become complicated with pneumonia.

TREATMENT.—The patient should be placed upon fever diet and treatment. The temperature of the room should be uniformly at about 68°, and it would be well to have a sufficiency of moist vapor always present, this being easily produced from boiling water. If the patient is full and plethoric, and the pulse bounding, we should control the same with a sedative, probably *veratrum viride* being the best; also make moderate use of wet or dry cups over the chest. Frequently, a little counter-irritation in the way of sinapisms to the chest will be found serviceable, or a warm mush poultice with red pepper in it, may be applied over the entire chest. The skin should be acted upon with small doses of tartar emetic or *ipecae*, and if necessary, with *jaborandi*. If the cough is very troublesome, inhalations of vapor, with turpentine and hot water, tincture of benzoine, or broken doses of Dover's powders may be given with much benefit. If the disease still shows a tendency to advance further down and to attack the capillaries, the circulation should be more thoroughly guarded with *veratrum viride*, counter-irritation should be more vigor-

ously pushed, and quinine and jaborandi should be administered freely. When the second stage is reached, the patient should be sustained by appropriate and nutritious diet, with such stimulants as milk toddy, egg-nog, essence of beef, porter, etc. To facilitate expectoration and dissolve tenacious secretions, the muriate or carbonate of ammonia, in combination with senega, squills and ipecac should be administered.

In the *Plastic* form the treatment should be almost the same as for that of the acute form. It should be decidedly more active, and freer use be made of the chlorid of ammonium, while the necessity for stimulation and full nutrition will become even more important.

In the *Capillary* form the symptoms are the same as those of acute bronchitis, with the exception that there is more fever. There is also more general depression and more evidence of want of aeration of blood, showing feeble circulation, great difficulty in breathing, a blueness of the lips and finger extremities, and great prominence of the veins. The patient exhibits a dull, delirious and stupid appearance and the extremities are cold, the pulse irregular, the sweating profuse, and collapse follows. Percussion gives a clear note, except over the collapsed portion of the lung, where it will be found dull. This dulness is changeable, as the secretion is moved and the collapsed lung becomes filled with air once more. The prognosis is always unfavorable in this disease.

TREATMENT.—If the case is seen early, there should be counter-irritation, wet or dry cupping, leeching, etc. In the case of elderly persons, we should prefer the dry cups. The arterial tension should be controlled to a certain degree with such agents as *veratrum viride*, *digitalis*

or prussic acid, though we must be careful not to depress the heart too much in this condition. Very full doses of quinine and jaborandi will be of especial service. As the disease threatens suffocation, it will be necessary to resort to emetics and nauseants as far as the patient can stand them, in order to mechanically unload these blocked tubes. Chloride of ammonium is also of especial value in this condition. Alcoholic stimulants must also be freely used as occasion requires.

In the *Chronic* form, the patient may be treated upon general principles. Mild counter-irritation, careful clothing to protect against the vicissitudes of temperature and moisture, and the avoidance of great diversity of temperature in the sleeping apartments must be well considered. It is also very important that the patient should inhale no dust or other irritating matter. He should be kept upon highly nutritious diet, and whenever necessary, cod-liver oil, egg-nog and a reasonable amount of alcoholic stimulants should be administered. Among the medicinal agents proper, the iodides, and especially the iodide of iron, are of general utility. Where the secretion is scanty, muriate of ammonia is a most valuable ally. Inhalations of the vapor of tar, or iodine and carbolic acid will materially aid us. Where the secretion is too profuse, we may sometimes find it necessary to check it by the administration of preparations of zinc or tannic acid, krameria, cubebs, etc. A preparation of wild cherry and diluted sulphuric acid is a remedy of considerable popularity.

CROUP.

This condition, known as laryngismus stridulus or spasm of the glottis, or spasmodic croup, is quite a common complaint among young children. It is evi-

dently due to some spasmodic action involving muscles which close the glottis, and may be due to a number of causes, both local and centric. We think we very often trace it to cold and exposure.

SYMPTOMS.—It usually comes on very suddenly and at night. The leading symptom is dyspnoea, or difficulty of breathing, which is accompanied with a stridulus, crowing inspiration. The appearance of the child struggling violently for breath, with anxiety depicted upon its countenance, and with blueness of the face showing want of aeration, makes a very prominent picture, which one may easily diagnose. Frequently the attack ends quite suddenly, and respiration is complete without alteration in the voice and without any cough. This condition may pass off, or may recur from time to time with increasing severity. It may last from a few minutes to an hour or so, perhaps longer.

TREATMENT.—This must be prompt, and will consist at first in every thing which will engage the child's attention and break in upon the nervous spasm that threatens to suffocate the sufferer. Shaking the child, dashing cold water in its face, slapping or rubbing the back and sometimes placing it in a warm bath, holding stimulating mixtures to the nostrils for inhalation, etc., are all not only household, but professional remedies. A prompt emetic is the most reliable agent, however, and this may be induced either by making the patient take full doses of ipecac, tartar emetic, sulphate of zinc or turpeth mineral. If there is difficulty about getting the child to swallow an emetic, we should resort to apomorphia hypodermically injected, while the powerful diaphoretic effect of jaborandi, aided by a hot bath, will almost surely break up the spasm. After the immediate attack is over, we

should look around for whatever causes may be producing this condition, and as far as possible remove them. Should there be nasal trouble, dentition or errors of digestion in addition to other supposed causes, the diet and general hygiene are entitled to more than a passing notice. The internal administration of kerosine oil in doses of from one to two teaspoonfuls will often produce the most satisfactory results. Melted mutton suet, and flannels saturated with turpentine and wound around the neck and throat very often afford prompt relief.

ASTHMA.

This disease is characterized as a spasm of the bronchial mucous membranes. In pure asthma of nervous origin the disease is often induced by local irritants and digestive disturbances.

SYMPTOMS.—The attack is usually ushered in by very difficult respiration, which oftentimes comes on very suddenly. There are loud, wheezing râles, which are more forceful and decided upon expiration. The oppression of the chest is very well marked and all of the muscles are brought into play in the endeavor to expand the chest and thus aid inspiration. After a certain lapse of time, from a few hours to a day or two, there is profuse secretion and expectoration, the bronchial tubes are relieved and the attack gradually subsides with a tendency to recur again under the provocation of dust, dampness, or digestive disturbance.

TREATMENT.—In considering the treatment we must exclude all cases of asthma which may be dependent upon cardiac trouble, aneurisms, or other organic causes. For the nervous, or spasmodic variety—the only form which we shall consider as pure asthma—we should re-

sort to such agents as will be likely to favor immediate secretion from the membrane and relax the nervous spasm. For that purpose, the atmosphere of the room should be kept moist and warm, counter-irritation should be kept over the chest, the skin should be encouraged to act promptly by positive diaphoretics, and we have found none better than jaborandi. The nervous system should be brought under immediate control by such agents as bromide of potassium, hydrate of chloral, or Hoffman's anodyne. Many patients have derived great benefit from the inhalation of burning stramonium leaves. Other agents of essential service are musk, assafoetida, caffeine, cocaine, grindelia robusta, and even the hypodermic injection of morphia. For the prevention of the recurrence of these attacks, the causes must be sought for as far as is possible, and every attention must be paid to building up the nervous system and improving the general tone of the patient by diet, exercise, clothing, diversion, and a change of climate, if necessary. The alterative course of treatment with iodide of potassium, iodide of iron or arsenic, has sometimes produced very wonderful results.

PNEUMONIA.

This disease may attack any age, but, is most prevalent between the ages of twenty and forty. It usually affects the lower lobe of the right lung. If the upper lobe is affected, usually the whole lung is affected. Double pneumonia is rare. The disease is divided into three stages: the first stage is that of simple congestion, the second stage known as red hepatization, is that in which there is exudation and consolidation, in which the air vesicles are occluded or nearly so, and the lung tissue has the appearance of a piece of liver. The third stage

is known as resolution or gray hepatization, in which the disease recedes or ends in fatty degeneration.

THE IMMEDIATE SYMPTOMS.—More or less severe chill, flushed face, headache, fever, and temperature running up to about 105° . Breathing is oppressed, respiration hurried, running all the way from 30 to 60 or 80 per minute, usually some cough present, but not severe. Expectoration is usually tinged with blood, having a frothy brick-dust appearance. The older writers speak of it as prune juice expectoration. We sometimes have jaundice connected with this trouble.

PHYSICAL SIGNS.—Percussion affords diminished resonance. Inspection shows a diminished respiration on the affected side. Auscultation gives feeble inspiration, prolonged expiration and crepitant rales heard only on inspiration. In the second stage these symptoms are all increased in intensity with marked bronchial breathing, vesicular murmur absent, and both vocal fremitus and resonance increased.

DIAGNOSIS.—With these symptoms carefully outlined, it will be only necessary to guard against mistaking this disease for acute bronchitis, the first stage of pleurisy or pleurisy with effusion.

TREATMENT.—The patient should be confined to bed, and in the early or congestive stages, we might resort to gentle action on the liver with minute doses of calomel and ipecac, a fair dose of sulphate of quinia from eight to ten grains, and repeated doses of digitalis, veratrum viride or aconite; warm poultices over the chest will be found serviceable here. If the congestion goes on into consolidation, we would then administer muriate or carbonate of ammonia in one to five grain doses, along with

syrup of senega, syrup of tolu and syrup of wild cherry. In this stage, our judgment has always been, that it is the best time known to apply the blister, and though others recommend that we wait later, we have found that this was the golden moment. In the event of not using blisters, if for any reason it should not be desired, dry cups, wet cups or poultices would be found valuable. Later on as the disease progresses, we should favor and encourage diaphoresis, lessen the amount of quinia, cease to give heart sedatives, but give digitalis, muriate of ammonia, beef broth, brandy, milk punch, etc., etc.

HAEMOPTYSIS—Haemorrhage from the Lungs.

This is usually not a disease within itself but a symptom of other complications. It often follows violent exercise, severe congestion, ulceration from tuberculous deposits, etc. It occurs in pneumonia, and is frequently vicarious and has been known to occur where there are peculiar idiosyncrasies from the use of certain articles of food.

SYMPTOMS.—The trouble usually comes on suddenly with a slight cough or spitting of blood, a mouthful at a time, the patient becoming thoroughly demoralized and frightened. The respiration and pulse are rapidly increased, while the color may be changed to that of pallor. The character of the blood brought up is red and frothy, and at first, uncoagulated. Later on there may be coagulated clots brought up from the larger bronchi.

DIAGNOSIS.—We would diagnose the haemorrhage in this case from haematemesis by the usual absence of nausea and vomiting and from the fact that the blood from the stomach would not be mixed with atmospheric

air and be frothy as it would if it came from the lungs. There should not be the hurried respiration, with coughing in haemorrhage from the stomach, and we would expect in the latter case to find the blood admixed with the food. It would be quite easy to diagnose this disease, also, from epistaxis or haemorrhage from the gums, by the symptoms which are very plain in both cases.

TREATMENT.—The patient should be kept perfectly quiet and his condition of fear and anxiety should be overcome by the assurance that there is no immediate danger to be apprehended. He must be prevented from even talking. To the chest we may apply dry cups, mustard plasters or turpentine stupes. Internally, we may administer turpentine, ergotole, tannic or gallic acid, and cracked ice, small pieces of which may be held in the mouth for some time. If the heart is bounding and the pulse is full, the circulation must be controlled by the administration of aconite, *veratrum viride* or prussic acid. The preparations of acetate of lead and opium or of turpentine and laudanum in repeated doses are all considered valuable remedies. A professional friend of ours, of wide experience, and who has been a personal sufferer himself for many years, always succeeds in promptly arresting these haemorrhages in his own case by saturating a large handkerchief with turpentine and holding it before his face, inhaling freely the vapors which would thus be carried into the chest. For a few days the diet should be plain and unstimulating, and great quantities of liquids should be avoided.

HYPERAEMIA OF THE LUNG—Pulmonary Congestion.

This trouble may be either active or passive, though it is often the result of some other intercurrent affection,

The active form may be brought on by violent and undue exercise, from over-exertion in singing, walking or jumping, or the rapid ascent of mountains and hills. More often it is the beginning of inflammation and is the result of exposure to cold, or arrest of cutaneous circulation. The passive form is the result, oftentimes, of adynamic disease, heart diseases, and anaemic conditions.

SYMPTOMS.—In both of the varieties we have similar symptoms. There is shortness of breath which is very decided, a short hacking cough, very little expectoration, accelerated circulation and general disquietude.

TREATMENT.—In the active form, we should treat this very much as we would the “beginning stage” of inflammation or that of haemoptysis, by using counter-irritation, local application of cups, either wet or dry, and even the general abstraction of blood by venesection. The force of the heart should be regulated by proper arterial sedatives, and the patient’s diet and exercise should be so ordered as to keep the circulation within proper bounds, and the nervous system should be so controlled as to keep it free from all excitement. In the passive form, where the heart is essentially at fault, we should have recourse to digitalis, caffeine, strychnia and strophanthus. Where the condition is due to Bright’s disease, the kidneys should be carefully looked after, and where it is from anaemia, due to prolonged depressing disease, hydrostatic congestion must be guarded against by changing the position of the patient’s body frequently, and by the administration of such tonics and stimulants as may be required.

EMPHYSEMA.

Emphysema is a dilatation of the air vesicles of the

lung. Sometimes there is rupture of the vesicles and the inspired air travels along between the connective tissue of the lung. This disease may be produced by violent expiratory efforts, such as may be seen in the performance on wind instruments. It is a sequence of chronic bronchitis very often.

SYMPTOMS.—There is a shortness of breath upon slight exertion, even, and there are very frequent attacks of asthmatic catarrh. Where the disease has progressed for some time, we may have symptoms of heart disease, in which there are palpitation and interference with the action of the liver and kidneys, due to disturbance of circulation on account of dilated heart.

TREATMENT.—A dry climate is of great value to patients suffering with this affection, as this sort of atmosphere, coupled with attention to clothing, will aid in preventing the bronchial catarrh. The use of iodide of potassium is highly recommended, as it is of great service in relieving this chronic bronchial trouble, and the frequent use of small blisters to the chest will also be found of much value. Where there is heart failure or dilatation, digitalis, strophanthus and strychnia are of great service. The skin and kidneys should receive due attention, and the circulation through the liver should be kept as near as possible at the normal rate by the use of gentle salines or mercurials. Where there is rupture of the air vesicles, and considerable infiltration, such a condition should be promptly relieved by puncture.

OEDEMA OF THE LUNG.

This serious trouble may follow congestions of the lung or alcoholic excesses, and consists of an effusion of serum into the air vesicles, and pulmonary tissues.

SYMPTOMS.—The symptoms are very much those of the congestive stage of pneumonia. There is much difficulty in breathing, in which the patient complains of an oppression over the chest. He presents a face of decided anxiety, and there is a short, constant cough, with frothing or bloody expectoration. Upon auscultation, we get a feeble, vesicular murmur with loud rales and very much serous effusion into the bronchial tubes.

TREATMENT.—Very much on the same line as that for congestion of the lungs, though it must be prompt and decided. We should make use of digitalis, jaborandi, counter-irritation and full doses of the carbonate or muriate of ammonia, with senega, squills or ipecac, as may be indicated.

CONSUMPTION—Phthisis Pulmonalis—Tuberculosis.

Consumption, as it attacks the lung, is essentially a chronic, catarrhal or interstitial pneumonia, resulting from the deposit of tuberculous matter here and there in the substance of the lung, which undergoes all of the various stages of inciting inflammation and suppuration, finally breaking down as pus and debris. This tuberculous condition is evidently due to systemic faults and may be either hereditary or induced. During the various stages of deposit, maturation and breaking down of these tuberculous masses, we have varying symptoms of local or general character, covering a period of time longer or shorter with the severity of the disease and the patient's surroundings, which may greatly prolong his life wherever they are favorable. While we find the disease going on in the lung, we are apt to find evidences of tubercular disease in other portions of the body, which will give rise to general symptoms of fever, head-

ache, etc. The duration of pulmonary trouble may cover a period of a few months, as in the galloping form in which the patient is rapidly carried off, to many years where every possible advantage being taken in the interest of the sufferer, his life is greatly prolonged.

SYMPTOMS.—Among the earlier symptoms, we would notice the slight hacking cough, which though dry at first, after a while becomes mucous in character and slightly streaked with blood. Under the irritation of the presence of tubercles, the lungs becoming more congested, we may expect hæmorrhages to occur. Following this, we may expect more abundant secretion from the lung, which becomes muco-purulent or purulent. Early in the disease, about the time of the deposit of tuberculous matter, we shall be able to detect some fever, especially in the afternoons and evenings. Indeed, we can almost always find fever in the earliest manifestations of this disease. As these tuberculous masses increase in quantity and begin to break down, we have fever of a more decided and permanent type. The patient has frequent chills, and as pus cavities are formed in the lungs, we have well marked hectic fever and exhaustion, night-sweats and great debility. With this advance of the disease from its inception to the breaking down of the tuberculous masses, we have rapid and progressive emaciation. Topical examination will give to the educated physician what he might expect under these circumstances: dulness on percussion where the tubercles are thickly studded in the lungs, bronchial respiration, cavernous respiration through the cavities, and amphoric respiration. Of course, all manner of murmur and râles may be heard through these inflammatory and breaking-down tissues; and there should be no need for the prac-

titioner to confuse this condition with that of any other. There are other varying symptoms, not all especially valuable, such as pains in the chest, reflex dyspeptic symptoms and cough. Some importance is attached to the form of sputum, especially the nummular form, which is brought out in roundish masses like coins and does not float on water perfectly. This is regarded by some as being pathognomonic of the disease.

DIAGNOSIS.—The diagnosis of this trouble in the advanced stages is sufficiently easy. It may be readily made from the great emaciation, high temperature, cough, and the physical signs given us upon auscultation and percussion. The important time, however, to diagnose this trouble is in the first stages, for then our treatment will be of the most avail. A slight cough, slight elevation of temperature every afternoon, disturbance of digestion, increased respiration or pulse, with any degree of emaciation, should cause us to examine very carefully the apexes of both lungs, the points at which we would suspect the first tuberculous deposit. Should we find the lungs clear, even with these symptoms present, we should strongly suspect that condition of the system favoring tuberculous deposit and should treat our patient accordingly. If we had but one symptom to go by in the earlier stage of the disease, we should attach much importance to the slight and daily rise in temperature in the afternoon and should regard that as a matter of grave suspicion, and look forward to the deposit of tubercle as one of the most probable consequences we can think of.

TREATMENT.—We have unquestionably of late years gained a considerable knowledge in the treatment of this disease. Many cases of consumption are undoubtedly

cured and many more incurable cases have been greatly benefited and life has been prolonged by proper and intelligent treatment. Regarding the disease as one of general disturbance of assimilation and nutrition, localizing itself in the lungs and dependent upon hereditary and local causes, our effort should be to place the patient in the best possible condition for preserving all of his vital forces, building up the system and retarding the advance of the disease. We have been able to find no specific for the treatment of this trouble, and our methods now, as in former years, consist in giving the patient the power to eliminate this morbid element from his system and to resist the tendency to new deposits of tubercle. In the earlier stages of the disease we must reduce the rapidity of the action of the heart, equalize the circulation and as far as possible, prevent the local deposit of tubercles and the subsequent inflammatory processes. Therefore, for evening fever, we will find *veratrum viride* and especially prussic acid, of much value in controlling the accelerated circulation. Gentle counter-irritation over the lungs should be resorted to, and all depressing causes should be removed. If the patient is overworked he must be given rest; if he is the subject of mental worry or depression the surroundings must be changed at once. If he is the occupant of unhealthy apartments, where the sunlight and pure air are not obtainable, the condition should be immediately reversed. In a word, the treatment of the pre-tubercular stage, or the first stage, consists essentially in the removal of all depressing causes, giving improved nutrition to the fullest extent and placing the patient in the most cheerful and comfortable surroundings possible. We know of no other approved treatment of consumption, and the rational treatment of this disease, from beginning to end, consists in

building up the system with an abundance of material for restoring the drain made upon it by maturation and the breaking down of tubercular masses. What we have said of the treatment in the earlier stages in general terms will apply as well for that throughout the entire disease. We will of course, have other symptoms to treat ; the intense fever, the violent and distressing cough, night-sweats and shooting pains through the chest all require special treatment, though the main success will depend upon the general outline which we have given above. For the severe cough we may make use of preparations of opium, codeine or hyoscyamus. We have a most excellent cough remedy in a combination of syrup of wild cherry, syrup of senega and diluted hydrocyanic acid. Where we need something for the cough and fever also, and a general tonic, we have found nothing better than a cold infusion made from wild cherry bark, of which we should give a wineglass full with a half ounce of whiskey and five drops of diluted muriatic acid, three times a day. For the very high temperature, we may give small doses of aconite or digitalis. We think very poorly of quinine in this disease and have never noted any benefit from its use. Where it has been especially hard to reduce the high temperature, we have resorted to antipyrine for a few days with very good results. We may give from five to ten grains of this every hour or two until the temperature has been reduced. For the distressing night-sweats the elixir of vitriol, ten drops three times a day, properly diluted, will often be of much service. Sponging the skin with solutions of alum and whiskey, or strong red-oak bark tea may be tried and very frequently with success. Belladonna or the alkaloid, atropine, may be given at night and it is a very valuable remedy. Going back to the general treatment, we desire to say that we

know of no special course applicable to all cases, or to any one case. Despite all that may have been said or written up to the present day regarding a microbic origin of consumption, nothing has been accomplished by the application of any remedy based upon such a theory, consequently all specific treatment may be ignored. In this connection we would say that "Koch's tuberculin craze," which seized our country, was well tried in this disease and died of its own weight along with many of its victims, should be remembered. Cod-liver oil, which has been a sheet anchor for years and years, has in our experience no real practical value whatever. Wherever it is well borne by the digestive organs, it is a most excellent remedy in the same sense that good mutton and butter or pure cream would be. After years of experience in the treatment of this disease, we desire most earnestly to impress upon our readers the relative value of this popular agent. We know that much harm has been done with it and that many patients have been hastened on to their end by having their digestive organs thoroughly destroyed by this popular remedy, when other and more palatable foods might have been assimilated. We urge its use wherever it is of service, but only as a food. Much good may be gained by causing the patient to take outdoor exercise whenever the weather will permit, and this exercise should be accompanied with interesting occupation, so that it may not be a forced task, but an entertaining business. In short, the patient should have outdoor employment as far as possible, such as will induce greater lung expansion, give better air and promote better digestion. We do not care to consume our space with a list of the specially prepared foods now upon the market for the different grades of the disease. There is absolutely nothing prepared which will compare with the

diet that a good and careful cook might furnish the invalid, catering to his appetite and tastes at all times. So far we have made no mention of alcoholic food. When we consider the peculiarities of the action of alcohol upon the human system, upon animal tissue, and upon albuminoids, it naturally suggests itself as one of the most important remedies and foods that we can give the consumptive. From our knowledge of the pathology and tendency of this disease we desire to stop destructive changes, and alcohol undoubtedly exerts this sort of influence upon tissue. As a fuel we can have no better, as a fat producer it is without a rival and as an antipyretic it is most valuable. In other words we advise the free and constant use of alcohol, wherever it can be borne by the patient and in whatever form he may select. Among the various preparations that are offered, we now think of one in which we get a fair amount of alcohol, and also nitrogenous food, which has proved of great service to us in the treatment of advanced phthisis ; we refer to a preparation known as "Ale and Beef Peptonized." We have been enabled with this compound to add greatly to the effort of the patient to sustain his failing powers, and to give comfortable sleep frequently when all other things had failed us. We have made no mention of the advantages that may be derived from travel or residence in localities claimed to be specially favorable for the cure of pulmonary troubles. All of these matters have their value, and it is presumed that where the pecuniary condition of the patient will admit of it, his physician will take into consideration the advantages of residence in these more favored localities. Sea voyages or other diversion, employment, hygienic conditions, etc., should all be thoroughly considered, and other such measures of a

like nature must be resorted to whenever it is thought proper and desirable.

DISEASES of the KIDNEYS AND BLADDER.

CONGESTION OF THE KIDNEYS.

This condition is induced by injury, exposure to cold and dampness, or by irritants passing through the kidneys.

SYMPTOMS.--Urine passed in small quantities, at frequent intervals, is high colored with traces of blood and albumen. There is a dull pain in the small of the back and usually some slight constitutional disturbance. The chronic form of this trouble is usually dependent upon disease of the heart, and the symptoms are those of the acute stage in more intense form, with greater deposits of urates and dragging pains in hips and loins.

TREATMENT.—Counter-irritation with iodine, dry cups, hot baths, infusion of digitalis, jaborandi, mild alkaline waters. Attention must be paid to the proper action of the skin, and warm clothing for the patient to prevent sudden congestions of the kidneys. No active diuretics should be employed.

BRIGHT'S DISEASE—Acute and Chronic Parenchymatous Nephritis.

This is a disease of the secreting structure of the kidney. It is an inflammation of the tubules and is often the result of exposure to cold, or of traumatism; it sometimes follows ordinary neglected congestion of the kidneys, and is very often the direct sequel of the acute exanthematous affections. It is very frequent as a concomitant of scarlet fever.

SYMPTOMS.—The urine is scanty, dark and of high

specific gravity, containing blood corpuscles and epithelial casts from the tubules of the kidney. Albumen is present in considerable quantity in the urine. Symptoms of arsenic poisoning are frequently present and should be guarded against in all cases, however mild they may appear. These symptoms as seen are stupor, headache, and listlessness and occasionally convulsions. With the subsidence of the active inflammation dropsy frequently follows. The outlook is favorable for most cases receiving prompt attention.

TREATMENT.—Our aim will be to relieve the kidney of all extra work, to favor the action of the skin and bowels and thus prevent dropsy and uraemic poisoning by getting rid of waste products in the blood. We must also sustain the action of the heart which is always a constant source of anxiety in these affections. The patient should be made to take absolute rest in bed for the sake of the heart and also for the advantages of uniform temperature favoring cutaneous action. The diet should consist of nothing but milk and the lightest gruels or broths. No stimulating articles of food or medicine should be employed. Counter-irritation, dry cups, iodine and small blisters are to be used. Digitalis in some form will be of service to the heart and will help to clear up the effusion. Cream tartar and jalap, croton oil or elaterium may be needed where the patient is disposed to become poisoned from retention of urea. Pilocarpine in small doses of one-twelfth or one-eighth of a grain hypodermically, or fluid extract jaborandi internally are very prompt to act where symptoms of uraemic coma are urgent.

Where the patient is strong and plethoric it will be advantageous to resort to vigorous purging with the drastics or salines. In anaemic or weakened conditions this

would not be advisable however and milder remedies for acting upon the intestinal tract would be indicated.

The *Chronic* form of this trouble is what is known as true Bright's Disease or fatty kidney. It is an aggravation of all of the symptoms of the acute form with many more complications. In advanced cases we find the entire system affected by this disorder. The nervous, circulatory, and digestive systems all are seriously disturbed by the retention of urea and waste products in the blood. The more prominent symptoms of this disease are scanty urine of high specific gravity, much albumen and granular casts of the tubules. Along with this condition of the urine there will be found dropsy and serous effusions in the cavities, progressive anaemia, marked and intractable digestive disturbances, headache, drowsiness, impaired vision from a low form of retinitis, and heart trouble. The prognosis in many of these cases, if the patients will submit to a rigid course of dieting and treatment, is very hopeful. In the chronic form as in the active we have the same indications to fulfil in the treatment; the kidneys must be relieved of all unnecessary work and irritation; the skin must be made to do double duty, and the bowels must also be called upon to eliminate an extra portion of effete matter formerly carried off by the healthy kidney. The patient must live upon skimmed milk if possible or where he cannot do this, his diet should consist largely of it with the addition of eggs and plain broths. He should be well clad in woolen underwear and protected from all sudden changes in the weather. Where there is need for a stimulant, port-wine may be allowed with the meals, though unless this is positively necessary it is best to avoid all alcoholic drinks. The anaemia in this trouble is always a prominent symptom and calls for special treatment. I have

found no agent to act so well as the ordinary tincture of chloride of iron in the anaemia of Bright's Disease. I am fond of giving ten to fifteen drops of the iron several times a day with as much ergotole in an ounce of good port-wine. This has been very beneficial in my hands and as a general prescription it will fill the bill very frequently. Digitalis, strophanthus, and strychnia may be used for the heart; Dover's powder, jaborandi, quinia, potass. nitrat., and ipecac for the skin; the salines, elaterium, compound-jalap powder, squills and similar remedies will be needed for clearing up the dropsical effusions. Where uraemia threatens we must resort to active purgation, hot baths and pilocarpine.

CHRONIC INTERSTITIAL NEPHRITIS— Granular Kidney—Gouty Kidney.

This disease is slow in its development and very chronic in character. It seems to be the result of long continued depressing causes acting upon the general system, for we find it following syphilis, overwork, exposure, mental worry, gout and other depressing causes. It is a disease of later life, coming on usually after fifty years. The kidney is small and shrunken, there is atrophy of the Malpighian bodies and tubules from interstitial pressure.

SYMPTOMS.—In this affection we find a variety of ill defined symptoms which are referable to all other organs of the body. We will find dyspepsia, nervous and circulatory troubles as in Bright's disease, but dropsy is usually absent except very late in the disease and then due to heart trouble. Urine is passed in large quantities and albumen is rarely present except in minute quantities. Late in the disease the hyaline casts will be found under the microscope.

The prognosis is unfavorable in this complaint though the patient may live a great while with it, going down all the time until the end is finally reached from exhaustion, cardiac failure or uraemic poisoning.

TREATMENT.—Not much can be expected from any drug in this affection and our chief reliance will be upon the regulation of the patient's diet and attention to his clothing, exercise and general hygienic surroundings. Nutritious and easily digested foods should be selected; milk, eggs and fresh meats are the best of this class. Arsenic, corrosive sublimate, and the iodide of iron have been suggested as likely to favor the absorption of the connective tissue between the tubules, but we have failed to find any special benefit from them. We would rely more upon the hypophosphites with some constant counter-irritant as the oleate of mercury over the loins. Long continued use of the interrupted current is of service in certain cases as favoring better nutrition of the kidney and dispersion of adventitious tissue. Whatever may be tried for the relief of this condition should be with a view to holding up the general health of the patient rather than expecting to effect a radical cure by any special drug action.

PYELITIS—Surgical Kidney.

Suppurative disease of the kidney may be confined to the pelvis or to the substance of the body of the kidney itself. It may arise from a number of causes, chief of which are calculi, cold, irritants, debilitating diseases, extension of inflammation from bladder or from gonorrhoea.

SYMPTOMS.—Frequent micturition, but little pain, abundance of pus in the urine, columnar epithelial cells

will be found indicating that the pus comes from the pelvis of the kidney. The urine will be found to have an acid reaction unless the bladder is also diseased. Where the disease is limited to the pelvis of the kidney there will be found little or no albumen or tube casts, and very slight, if any, fever. Where the structure of the kidney is involved both albumen and tube casts will be found and hectic fever and grave constitutional disturbances will be present.

DIAGNOSIS.—There is a likelihood of confounding this trouble with inflammation of the bladder but in this latter affection the urine is almost invariably alkaline, the epithelial cells are of the squamous variety instead of the columnar as in pelvic affections, and there is pain over the region of the bladder upon or after urinating.

TREATMENT.—General attention to rest, mild unstimulating but nutritious and digestible diet of milk, eggs, white fish, mutton and only the best dry and sweet bread with a few well cooked vegetables or thoroughly ripe cooked fruits. Dry cupping or iodine over the loins with comfortable housing and clothing will be of general value. For internal administration a great number of remedies are mentioned but we have little faith in the majority of them. We have obtained the best results from the use of lime water abundantly taken with milk or simply with the water drank for thirst, then with sulphide of calcium, eucalyptus, and carbolic acid. Among other agents that may be mentioned are copaiba, cubebs, oil of sandalwood, tar, turpentine, and many similar drugs. In very debilitated conditions tincture of chloride of iron with or without cod-liver oil may be given with advantage where the stomach will bear it. Where the bladder is involved and

cystitis is a complication, benzoic acid or the benzoate of sodium will be of service.

RENAL CALCULI.

The pelvis of the kidney is frequently the seat of calculous formations, and many of the subsequent diseases of the kidney can be traced to damage done by these calculi either in producing hydronephrosis from obstruction or by inducing abscesses in the tubular structure of the organ.

SYMPTOMS.—An attack of kidney colic, as the passage of a calculus through the ureter is usually called, is announced by most unmistakable symptoms. Pain is very intense and commences in the loins extending down the ureters and into the head of the penis. There are frequent efforts to urinate with but a small quantity passed at a time and this is high colored and often tinged with blood. The patient has nausea and often actual vomiting with cold clammy skin and much depression. The paroxysms last from half an hour to an hour and are followed by a temporary lull, which is in turn followed by other paroxysms until the stone finally reaches the bladder. An attack will usually last from four to eight or ten hours and leaves the patient very sore and exhausted.

TREATMENT.—The main thing to be done in the immediate attack is to produce relaxation and favor the speedy transit of the stone to the bladder. Warm or hot baths, hypodermics of morphia, or the same by the mouth, chloroform, belladonna, and nauseants will all be likely to come in for use before the patient is relieved. The most important measure of treatment after the relief of the immediate attack is to prevent the future tendency to the formation of other calculi. This is best done by

examining the nature of the calculi and finding what diathesis we have to contend with. If it is the uric acid, we must limit the amount of nitrogenous foods, keeping the patient mostly upon milk and vegetables with very little acid as drink or in fruits. Alkaline diuretics as citrate or bicarbonate of potassium, citrate of lithium, etc., are of especial service here. If it is the phosphatic calculi that are forming we should give the mineral acids well diluted with water. Benzoic acid is a good remedy in this condition. Where the calculus is of the oxalic variety nitromuriatic acid is said to be the best remedy. In conditions of lithiasis of whatever variety, it is important to keep the kidneys active and well flushed out, and for this purpose the gentle diuretic mineral waters should be freely used, as well as milk, buttermilk, fruits, etc.

AMYLOID KIDNEY—Waxy or Albuminoid Kidney.

The disease is brought on by long continued depressing causes. The urine is passed in large quantities, contains considerable albumen, large waxy casts devoid of epithelium, are found, and there is similar enlarged and altered condition of liver and spleen. Anaemia is a marked feature of this condition.

TREATMENT.—Knowing the pathology as we do, it is apparent that a general line of treatment directed to preventing undue destruction of structure of the kidney, supplying waste of tissue, and a general alterative, supportive and constitutional course will be the most appropriate. Clothe the patient comfortably, give him an abundance of albuminous food in shape of milk, eggs, etc. The iodide of ammonium, syr. of iodide of iron, and cod-liver oil are all recommended.

CANCER OF THE KIDNEY.

This trouble as well as tubercular disease occasionally attacks this organ. Both of these conditions would be recognized by the altered urinary secretion, which would be variable in quantity, frequently tinged with blood and containing pus or debris from destructive processes in the kidney. There would be pain, some febrile disturbances and the general anaemia and cachexiae peculiar to the cancerous or tubercular conditions.

TREATMENT.—This should be conducted purely on general constitutional lines, our aim being to allay pain and support the strength of the patient.

HAEMATURIA.

Technically speaking this is a condition of bloody urine though usually we are led to regard it as a haemorrhage from the kidney. We may have this haemorrhage from kidney, bladder or urethra, however, and in consequence we adopt the term as meaning the presence of blood in the urine.

THE CAUSES are inflammatory conditions of kidney, calculi, parasites, scurvy, purpura and malignant conditions.

SYMPTOMS.—The presence of blood is the only necessary symptom to establish the diagnosis.

TREATMENT.—It is of the first importance to determine from whence comes the blood, and for this reason we present the special symptoms of haemorrhage from the different portions of the urinary tract. When the kidney is the source of the haemorrhage the blood is thoroughly mixed with the urine and gives it a smoky appearance; the urine is also likely to contain a certain proportion of

albumen and the blood corpuscles are full and well developed. When the blood is from the bladder it is not intimately mixed with the urine, but comes either in advance of the urine or with the passage of the last of it. There is more often bladder tenesmus, and frequent urination; while under the microscope the blood corpuscles appear broken up and shrivelled. When it is from the urethra there is scalding and burning as the urine is being passed and frequently a few drops of blood precede the passage of the urine. It is therefore upon this knowledge that we can treat the condition in the most satisfactory manner. Where purpura, scurvy and constitutional causes are operating they should be remedied and the general condition of the patient improved. If malarial influences are causing this trouble in the kidney, quinine, and bitter tonics will help to cure the patient. The general line of treatment for all conditions of haematuria will consist in moderate counter-irritation over the region of the kidney, the internal administration of gallic acid, the mineral acids, ergotole, tr. of iron and mild diuretic mineral waters.

HYDRONEPHROSIS.

We find in this affection a dilatation of the pelvis and calyces of the kidney with non-purulent fluid. This is due to obstruction usually or to twisting of the ureter. Sometimes malignant disease is the cause of the obstruction.

SYMPTOMS.—The prominent symptom is the presence of a tumor in the renal region which must be distinguished between ovarian disease and an overdistended colon. Floating kidney also complicates the diagnosis.

TREATMENT.—The treatment for this condition as well as that for floating kidney to which we have alluded is

purely mechanical or surgical, and especially for the latter. Tonics and constitutional treatment are indicated. Where the distention is great in hydronephrosis we may resort to aspiration and finally excision if the case is an extreme one. In floating kidney we must replace the organ, apply a suitable bandage and put the patient upon a bracing tonic course.

CYSTITIS.

This condition known as vesical catarrh, inflammation of bladder or chronic vesical gleet is characterized by uneasiness and a sense of pain and tenderness over the bladder and hypogastrium, with a constant desire to micturate, while the urine is passed in small quantities, with pain and a sensation of burning. There is generally a considerable amount of mucus mixed with the urine, and in chronic cases, we find pus, blood or an ammoniacal thick gelatinous ropy mucus or muco-pus.

TREATMENT.—The all important thing to do is to find out and remove the cause as far as possible. If there is any local irritant or special degree of acidity or alkalinity excessive enough to give rise to injurious irritation, it should be removed at once. In acute cases it will be of great service to give warm hip-baths, use fomentations and poultices over the hypogastrium, apply leeches to the perineum and over the bladder. A hop poultice is an excellent application for the hypogastric region in acute cases. The urine should be rendered bland and unirritating by the administration of demulcent drinks, lime water and alkaline salts. Bi-carbonate of potassium, either plain or effervescing will usually prove of great service. Sometimes where the bladder is filled with highly ammoniacal urine it will be found necessary to

render the urine somewhat acid and antiseptic by the administration of acids in the shape of benzoic or boracic acid and in washing out the bladder with warm antiseptic astringent or acid fluids. Other popular remedies are teas, decoctions, or fluid extracts made from buchu, uva ursi, pareira brava, triticum repens, golden rod, etc. Balsam copaibae with liquor potass. has long enjoyed a good reputation in chronic cystitis. In all cases of cystitis of any standing, however, there will be found a condition of intense congestion and thickening of the mucous membrane with lowered vitality of the parts. It is almost impossible in many of these cases to effect a cure with the use of ordinary internal remedies and we are compelled to resort to local treatment. For a long time we have been so uniformly successful with one agent in particular in the local treatment of this troublesome complaint, we trust our readers will pardon us if we go a little freely into details in describing it. We have reference to a preparation known as ergotole and which is manufactured by the reliable and professional house of Messrs. Sharp & Dohme, of Baltimore. This agent represents all of the valuable constituents of ergot without any of its impurities or inert properties. It is quickly absorbed, prompt in action, useful for internal, local or hypodermic administration and requires the minimum dose to give characteristic results. As we have said, we would not give it for all of the drugs in the materia medica in the treatment of sub-acute urethritis, chronic cystitis, or gleet. As soon as we have regulated the condition of the patient's urine and somewhat abated the extreme irritability of the bladder, we proceed at once to wash out the bladder, in very bad cases, with an alkaline bath of borax or some simple agent; frequently we only use hot water as a wash, followed with a smaller

quantity of ergotole, either of full strength and alone or diluted and combined with some alkaline or astringent mixture. As a general thing, however, our main reliance is upon this preparation, and we are confident of its ability to re-establish a healthy condition of the mucous membrane in all states of chronic or passive congestion of the membrane in cases of cystitis, gleet, urethral relaxation, etc. So well convinced are we of its positive value in chronic urethritis, we often make use of no other agent in long standing and intractable cases. We simply commence and continue with ergotole alone until the cure is complete. We should state that in these cases our plan is to open up the canal of the urethra with the sound to its limit or normal calibre and with a deep urethral syringe carry the ergotole in its full strength to the congested parts. This application gives no pain, lessens irritation, and speedily restores the diseased urethra to its former condition of health.

DISEASES OF WOMEN.

In a work on practice which is destined to be a condensed companion, we cannot depart very far from a consideration of general diseases as they confront the medical man in his daily work. But there is a certain class of non-surgical female disorders which must be met with in practice and demand the most serious attention of the practitioner. It is of these prominent troubles that we will speak in this section.

LEUCORRHOEA—Whites.

This very common and disagreeable affection may arise from a number of causes, chief of which are pro-lapsed conditions of the uterus, general debility and want of tone, and often severe constipation.

SYMPTOMS.—The discharge itself is the most direct symptom. It may consist of simply an over-abundant mucous secretion, or it may be so severe as to consist of a very great discharge of muco-purulent matter, giving rise to much excoriation of the parts and inducing reflex aches and pains in the limbs and back.

TREATMENT.—If the uterus is displaced it should be restored to a normal position; tonics should be employed, constipation relieved and suitable astringents and antiseptic washes used. The free douching of the entire vagina with large quantities of hot water does great good by cleansing out the vitiated secretions, and also by toning up the relaxed parts. The various astringents such as alum, tannin, zinc, acetate of lead, sumac, and red-oak bark all make excellent injections for this trouble.

VAGINITIS.

Inflammation of the vagina may be produced by any irritating agent, excessive indulgences, or from specific causes.

SYMPTOMS.—Swelling of the labia and vagina, throbbing heat and tenderness, excoriations and frequent desire to pass the water with violent pain and profuse purulent leucorrhoea.

TREATMENT.—At first a mild cathartic will be of service if there is much inflammation. Copious hot water injections either simple or medicated with glycerine, laudanum or cocaine are very soothing. For the *ardor urinae*, nitre, buchu, or alkaline drinks are indicated. Later on we may resort to the more decided astringent washes and specific remedies where the case is dependent upon specific causes.

AMENORRHOEA.

Where menstruation is and always has been absent there is imperfect or tardy development of ovaries and uterus. Treatment consists in everything that will favor physical development. Where menstruation is scanty or irregular, if the general health is good and no pain, no special treatment is required; but if there is disordered health and the most common condition (anæmia and constipation), give iron (Blaud's pills), deutoxide of manganese, aloes, and salines; hot hip baths several nights in succession before expected period; good diet, fresh air, and plenty of exercise in open air. Some patients flow more if they remain in bed during the period. Galvanism will sometimes succeed when everything else fails.

Probably one of the most valuable remedies now before the profession for amenorrhœa is Dioiviburnia, a preparation which fully meets more of the indications than any other drug or combination with which we are acquainted; and as we shall make further allusion to it in connection with other female complaints, we will introduce it here: Dioiviburnia is composed of *viburnum prunifolium*, *viburnum opulus*, *dioscorea villosa*, *aletris farinosa*, *helonias dioica*, *mitchella repens*, *caulophyllum thalictroides* and *scutellaria laterifolia*. It is the ideal uterine tonic and anti-spasmodic. It is put up by the Dios Chemical Company of St. Louis, Missouri, who handle it in a purely ethical and scientific manner, publishing their formula and introducing the preparation solely to the profession. A very excellent formula in anæmia or chlorotic amenorrhœa is the following combination:

R	Ferri et quin. citrat...		$\frac{7}{2}$ i.
	Dioiviburnia.....		$\frac{5}{3}$ xvi.

M. Sig. Tablespoonful after meals.

ACUTE OOPHORITIS.

SYMPTOMS.—Severe pain and great sensitiveness to touch in region of ovary, which is usually enlarged. Fever and chill. Resolution occurs within a week or proceeds to abscess—rare.

CAUSES.—External violence, gonorrhoea, suppression of menses, or extension from pelvic peritonitis.

TREATMENT.—Chloral enemata, morphia hypodermically, bromide of potassium, dioviurnia, ice-bag, leeches.

CHRONIC OOPHORITIS.

SYMPTOMS.—Fixed pain over ovary, dysmenorrhoea and hysteria, pain in rectum and down thighs—exaggerated after defecation, leucorrhoea, and sometimes dyspareunia.

COURSE.—Chronic and common, usually due to uterine displacement.

TREATMENT.—Bromide of potassium, dioviurnia, cannabis indica; locally, tincture iodine, blisters, oleate of mercury, correct displacement of uterus.

DYSMENORRHOEA

VARIETIES.—Neuralgic, congestive or inflammatory, obstructive, membranous, and ovarian. Remedies: Liq. ammoniac acet., belladonna, chloral hydrate (preferably by enema), iron, deutoxide of manganese, guaiacum, opium, potass. bromide, galvanism, dilation of cervix (in obstructive form), and correction of displacement when present.

MENORRHAGIA AND METRORRHAGIA—

Are symptoms of several uterine affections, and an examination is essential to diagnosis. It is sometimes due to debility from protracted nursing, local causes, tumors, polypi, etc., affections of the os and cervix, congestion of the womb or ovaries, subinvolution or inversion of the womb. The nervous system primarily or secondarily is often responsible for aggravated menorrhagia. Remedies : Arsenic, Rockbridge alum water, cannabis indica, ergotole, gallic acid, bromide of potassium, quinine in malarial districts, hot vaginal injection, with or without astringents, such as alum and tannin ; tampon the cervical canal. A valuable formula in this trouble is :

R.	Ergotole.....		ss.
	Dioivburnia.....		xvss.

M. Sig. Tablespoonful three times a day in hot water.

Inflammation of the endometrium may be confined to the cervix, or the body may be also implicated. The salient points of diagnosis are leucorrhœa, pain in back, loins, and pelvis ; menses too scanty or severe, too frequent or reverse ; nervous disorders. Bimanual examination elicits pain in fundus or cervix ; in cervical form, os enlarged, lips puffy or eroded, and sound encounters obstruction at internal os. Where the fundus is involved the os interum is usually patulous, uterine cavity prolonged, and there is tenderness when touched by the probe.

TREATMENT.—There is a tendency on the part of gynecologists to greater conservatism in the management of these cases. The heroic intra-uterine medication is losing favor as a consequence of the untoward results which sometimes followed. Some of the cases will recover

without local treatment under a judicious constitutional treatment, such as sexual hygiene, the avoidance of constipation and everything which tends to produce engorgement of the pelvic vessels. An occasional blue pill, saline purgatives, heart tonics, such as digitalis and strophanthus ; nerve tonics, as strychnine and quinine. Iron is positively hurtful. If anæmia exists, subnitrate of bismuth and arsenic are preferred. Local treatment : Hot vaginal douche, tampons of glycerine in vagina, correction of displacements. The erosions and so-called ulcers of the os are best treated by solution of nitrate of silver applied by means of absorbent cotton on probe, and carried up into the cervical canal short of the os interum.

GENERAL AND UNCLASSIFIED DISEASES.

DIPHTHERIA.

This epidemic and highly contagious trouble is mostly confined to children.

SYMPTOMS.—More or less fever with a spreading inflammation of the mucous membrane of the fauces and tonsils attended with the formation of greenish white, slightly elevated false membrane in patches here and there over the inflamed area. Besides these symptoms there is always a swelling of the submaxillary and post-cervical glands.

PROGNOSIS.—Should be guarded in all cases, as this is a most dangerous and deceptive disease.

TREATMENT.—Sustain the child from the start with quinine, iron and alcohol, as well as with the most concentrated foods. Do not fret or worry it by cauterizing the false membrane ; it does no good to forcibly remove

it and only endangers the safety of the child by promoting a struggle and giving a larger exposed surface for absorption of poisonous material. A simple wash, spray or gargle of diluted tr. of iron, papoid, or peroxide of hydrogen will answer all purposes for local medication. The lime steam bath, made by allowing lime to slack in the room is of much service. The heart should be watched and held up when it shows a disposition to fail. After convalescence the child should be well clad and kept up for a long time on tonics and restructives, as there may be paralysis or sudden heart failure long after all danger seems past.

PERTUSSIS—Whooping-Cough.

SYMPTOMS.—This contagious disease of childhood commences as an inflammation of the naso-bronchial tract with an acute catarrh and some dyspnoea at night. In about ten days it reaches the stage of whoop. The child has from time to time prolonged attacks of spasmodic coughing which seem to threaten strangulation until he brings up a little mucus and for the time is relieved. In these spells the food is frequently brought up during the spasmodic coughing. The disease may last from a month to six months and gradually passes away.

TREATMENT.—For the catarrh, ipecac, squills, ammoniac muriate, and similar agents. For the nervous symptoms, potass. bromide, valerian, assafoetida, cocaine spray locally, and nerve tonics. Comfortable clothing, generous diet, mild counter-irritation, stimulants, and sunshine are the leading measures for general treatment.

PAROTITIS—Mumps.

SYMPTOMS.—This contagious trouble commences with

chill, fever, headache, and malaise, and in from twenty-four to forty-eight hours there is a swelling of the parotid gland with stiffness and pain in the tempero-maxillary articulation. Pain is especially severe upon motion of the jaws or upon exciting the secretions of the gland with vinegar or any condiment of the kind. There may be a metastasis to the testicle or breast.

TREATMENT.—Fever diet and mixture, light purgative and warm anodyne applications over the gland. Guard against taking cold from too early exposure. When metastasis occurs the parts affected must be treated on general principles.

ASIATIC CHOLERA.

This is a disease due to some specific germ and seems to be carried rapidly over vast areas in the atmosphere.

SYMPTOMS.—Usually a premonitory diarrhoea, then violent purging, copious watery discharges, and the peculiar rice-water stools following. Along with these symptoms are vomiting, cramps of the muscles, great thirst, prostration, coldness of skin and collapse.

TREATMENT.—Arrest if possible the premonitory diarrhoea in all cases when cholera is prevailing. For this purpose use morphine or any of the opiates, camphor, brandy, capsicum, or other agents. Ice, brandy, cocaine, morphia hypodermically and sinapisms can be used for the vomiting. An enema of warm salt water has proven useful both for arresting the vomiting and for restoring circulation in the algid stage. Warmth must be applied to the surface in shape of hot cloths, heated stones, bottles of hot water, and in addition, stupes, sinapisms and frictions. In the stages of prostration and collapse we must use brandy, ammonia, and other rapid and

diffusible stimulants. The acids have been very strongly recommended, and we would advise their use. Diluted sulphuric, muriatic, or nitro-muriatic acid may be given every now and then when the patient complains of thirst. Enormous doses of calomel are very strongly advocated by some practitioners. We favor minute and frequently repeated doses of calomel, as it may exert an antiseptic influence and aid in quieting the great nausea.

ANAEMIA.

This is a condition of the system in which there is deficiency of the red corpuscles and albumen in the blood.

CAUSES.—Any and all depressing agencies, especially bad hygiene, poor food, wasting drains on the system, certain poisons, and mental worry.

SYMPTOMS.—Extreme pallor, great muscular weakness, rapid, weak and irregular heart action with a venous hum in the jugular veins. The respiration is hurried and sighing, and there is faintness and dizziness on exertion. The most striking symptom is the deadly pallor that the patient presents, which is especially noticeable in the tongue, gums, cartilages of the ear and in the conjunctiva.

TREATMENT.—In these cases sunlight, good feeding, fresh air and cheerful surroundings are of immense service. All drains upon the system, depressing causes and unhygienic conditions should be remedied. Iron is the leading drug to be used, and there is no better form in which to give it than that of the ordinary tr. of the chloride where the digestive organs will tolerate its use. If it disagrees, we can try the citrate or lactate. We have been very much pleased with the use of dialysed iron in

these cases, as it neither constipates nor offends the stomach. Whatever form of iron that we may select must be continued for a considerable time and pushed in increasing doses until the improvement is satisfactory. In addition to the ferruginous preparations, we must avail ourselves of the other adjuvants in building up the system, such as the hypophosphites, cod-liver oil, malt extracts, and the various bitter tonics, mineral acids, etc. In women we find this condition frequently associated with menorrhagia and other disordered conditions of the uterine functions, and we should pay attention to this condition which may be either the cause or the result of the anaemia. In these cases we would find benefit from the use of mineral waters containing alum, iron, etc., as well as the tonic antispasmodics diospyrin, neurosine, and other agents of this class. In the form known as *progressive* or *pernicious* anaemia the disease is not well understood as to its exact pathology. It has a tendency to pursue a rapidly progressive course and is almost always fatal. It is supposed to be due to disease of the spleen or lymphatic glands in some instances, though the pathology, as we have said, is not clear. The symptoms are those of aggravated anaemia, and the treatment should be conducted on the same general lines.

LEUCOCYTHAEMIA.

This condition resembles pernicious anaemia in many respects and the pathology seems to be about the same as far as can be seen. It is essentially a state of superabundance of the white globules in the blood. It seems that this is due to the formation of the same in the lymphatic glands, spleen or marrow of the bones.

SYMPTOMS.—These are essentially those of severe an-

aemia with enlargement of the lymphatic glands, and a haemorrhagic condition. As the disease progresses the patient has very great depression with alteration of the special senses, haemorrhages from gums, stomach and bowels, and finally he dies from exhaustion.

DIAGNOSIS.—With these symptoms the diagnosis may be fully confirmed by examining the blood under the microscope.

TREATMENT.—This should be conducted much as we would in cases of pernicious anaemia. Good food, comfortable clothing, ferruginous and bitter tonic preparations are all indicated. In lymphatic enlargements, syr. ferri iodidi, potass. iodide, cod-liver oil, sea bathing and traveling are recommended. Where the spleen seems to be primarily at fault much good is said to be derived from the use of ergotole hypodermically. Nutrition and assimilation should be improved and sustained by every possible means.

ADDISON'S DISEASE.

This is another grave form of anaemia which usually ends in death within eighteen months or two years.

SYMPTOMS.—Marked anaemia with a peculiar bronzing of the skin and accompanied with gastric and intestinal irritation. The discoloration of skin begins about on the face and in the folds of the body in patches at first, but gradually increases until the entire surface is deeply bronzed. There is a tendency to dropsy as the disease advances and later on the cerebro-spinal and sympathetic nervous systems suffer and the patient finally dies from exhaustion. In this trouble in addition to the deficiency of red globules and albumen in the blood, we find upon post-mortem examination, a strumous degeneration of the supra-renal capsules.

TREATMENT.—Here, as in other forms of anaemia, proper diet and hygiene are of the first importance. Moderate use of alcoholic stimulants may be advantageously allowed. The hypophosphites, chloride of gold and sodium, tr. ferri chloridi, arsenic, strychnia and phosphorus are all recommended in this trouble, though we cannot expect to do more than prolong life reasonably by any course of treatment.

SCORBUTUS—Scurvy.

This is a disease due to a deficiency of certain food elements for a prolonged time. It is pretty well proven that the lacking ingredients are contained in the usual vegetables and fruits.

SYMPTOMS.—General anaemia, lassitude, mental depression, palpitation and breathlessness upon the slightest exertion. There is a spongy protruding condition of the gums in which they bleed freely upon the slightest touch, the teeth become loosened and there is foetor of breath. Here and there we will find ecchymoses or petechiae under the surface of the skin, and haemorrhages frequently occur from stomach or bowels.

TREATMENT.—An immediate change of diet from the salt meat or other former deficient food, to one in which an abundance of vegetables, fruits, potatoes, cabbage, and lemon or fruit acids is supplied. Sweet milk is also of great service in this affection and should be freely prescribed. The free use of lemon juice, tr. of iron, mineral acids and bitter tonics will give the best results. For the spongy and bleeding gums we may use a mouth-wash of myrrh and capsicum, or an infusion of sumac berries with a little alum. Red oak bark tea makes a most excellent wash, while for thoroughly disinfecting the

mouth and hastening a cure the peroxide of hydrogen is of the greatest value.

PURPURA—Simplex and Haemorrhagica.

In this affection we find an extravasation of blood in spots under the skin in form of petechiae or ecchymoses in the simple varieties of the disease, and in the haemorrhagic forms there is additional haemorrhage from the mucous membranes, stomach, bowels or elsewhere.

SYMPTOMS.—The haemorrhagic conditions constitute the prominent symptomatology of the affection.

PATHOLOGY.—The pathology is but poorly understood and while the symptoms are very much like those of scurvy, the two diseases are different and dependent upon different causes. Purpura is entirely independent of the diet and may appear at all periods of the year and while the patient has access to all kinds of food, vegetables and fruits. The blood is altered in its composition and its fibrin forming properties are diminished. The capillaries are frequently diseased and we have haemorrhage by reason of these two conditions of watery blood and weakened vessels.

TREATMENT.—The patient should be sustained with stimulants and tonics and his food should be selected so as to give him the greatest blood making pabulum. Ergotole has been found very valuable in this trouble for checking haemorrhage and toning the capillaries. Tr. of iron, elixir of vitriol, Huxham's tincture, the mineral acids and bitter tonics are all to be used. Turpentine in doses of ten to twenty drops every two or three hours is highly recommended.

RHEUMATISM.

CAUSES.—Diathesis has much to do with the production of this trouble, as well as improper diet, continued overwork, and exposure to cold and dampness. The blood will be found excessively acid in this disease, due to the presence of uric and lactic acids.

SYMPTOMS, COURSE, COMPLICATIONS, ETC.—Fever, which follows severe chill, stiffness and severe pain in one or several joints. The joints become red, swollen, hot and painful upon any attempt at motion or if they are touched. The fever ranges from 102° to 104° . The urine is usually scant, high colored, and loaded with urates. The course of this disease runs from ten days to six weeks. In the acute form we may have such complications as valvular heart troubles, due to morbid deposits upon the valves, bronchitis, cerebral metastitis, liver troubles, etc.

TREATMENT.—Wrapping the inflamed joints in flannel or rubber bandages has proved beneficial without other local medication. Hot and moist applications, liniments of laudanum, sweet oil, and camphor are serviceable. Cocaine, gr. xx to lard, 1 oz. makes an excellent ointment. The effort should be made to render the blood free from acidity as soon as possible by the administration of the potash or soda salts. Bi-carbonate or acetate of potass. in 30 to 40 grain doses every few hours for several days will speedily change the characteristic acidity of the blood. Bromide of potassium is a most excellent agent for the relief of pain and restlessness, as well as for its power to render the blood alkaline. Salicylic acid or the salicylates have played an important part in the treatment of rheumatism of late years, though in weak heart or threatening heart complications, their adminis-

tration should be undertaken with caution. The dose of sodium salicylate should be from 15 to 20 grains every two or three hours in any simple menstruum until the amount reaches a drachm or two in twenty-four hours. Salicylate of lithia in 5 gr. doses three or four times a day is a very valuable agent. The old fashion remedy of colchicum may be mentioned. Sulphate of quinia, tincture chloride of iron and other similar agents are of value in various conditions. Antipyrin, phenacetine, and recent new remedies are before the profession, but their merits are not yet well established. As a local application "salol collodion" is highly recommended as relieving pain rapidly. This is made by dissolving 4 parts of salol in 4 parts of ether and adding 30 parts of collodion; of course, applied to the joints as a simple collodion. Oil of wintergreen, locally and internally, has received much favor too. Careful attention to diet, avoiding such agents as produce internal congestion and favor the formation of uric acid is to be enjoined. The occasional use of alkaline waters, such as Vichy, Carlsbad, etc., will favor a continuance in health.

DIABETES MELLITUS—Sugar in the Urine.

The pathology of this trouble is most obscure, as the abnormal excretion of sugar by the kidney may depend upon so many very widely divergent causes. Pancreatic, hepatic, cerebral, or nervous disturbances are all capable of inducing diabetes. Even an undue proportion of certain foods may bring about this pathological condition.

TREATMENT.—The diet should consist as far as possible of such articles of food as are free from sugary or starchy ingredients. For this reason we interdict the use of white bread, potatoes, beans, peas, rice, etc., all

sugars and sweets, as well as fermented drinks. We allow animal food, milk (in the majority of cases), gluten bread, or where it is impossible to get this latter article, have the bread sliced thin and baked until it is a crust through and through, thus transforming the starch to some extent. Glycerine or saccharine may be used for sweetening purposes. The patient should be comfortably clad and the skin encouraged to act by the use of warm baths when necessary. It is important to build up and maintain the system at the best possible standard, and therefore we would not advise a strict adherence to any line of practice which seemed to depress or disagree with a patient, however sound it might appear theoretically. We remember having heard a case detailed by an old physician, now dead, in which a man far advanced in emaciation and several local complications, the sequela of chronic diabetes, finally abandoned hope of recovery, and commenced to eat greedily of brown sugar, sweet meats, etc., daily for a considerable time—indeed until all craving for such things had been appeased. The result was that a cure of his diabetes ensued without further attention to special treatment. We throw this out incidentally to say that in the practice of medicine cures sometimes follow very peculiar practice! Of drugs proper, we have quite a fair number which have been found useful, and in a few cases cures have been claimed from their use.

Opium, codeine, ergotole, salicylate of sodium and a few other agents are generally recommended.

Among the most recent remedies mentioned in the International Medical Annual, for 1892, may be mentioned: Jambul, salicylate of sodium, creasote in doses of four to ten drops daily, arsenic, and basic hippurate of chalk. Professor Dujardin Beaumetz has pointed out the value

of fatty foods, and recommends a bread made from the soja meal. He further recommends one potato at each meal as a substitute for bread, and very wisely condemns the use of skimmed milk as being most disastrous.

SUNSTROKE—Heatstroke, Insolatio.

There are two varieties of this trouble. One is due to the direct rays of the sun, which produces cerebral congestion. The other is due to prolonged and excessive heat and may occur independent of the immediate rays of the sun upon the patient. The first form is sunstroke, and the second is heatstroke.

SYMPTOMS.—Sunstroke comes on suddenly, the patient usually falling in an unconscious state, with hot head, throbbing temporal arteries, stertorous breathing and slow full pulse. There may be convulsions and speedy death. Heatstroke occurs also quite suddenly, but there is no unusual or excessive heat of head, the pulse is weak, there is no stertorous breathing and less unconsciousness and the patient's condition resembles an attack of syncope. The depression is very profound and the prostration following an attack of heatstroke lasts for quite a long time.

TREATMENT.—In sunstroke the patient should have ice or iced water freely applied to the head, and immediately following this we should resort to local abstraction of blood by cupping or leeching about the temples or back of head. The head and shoulders should be elevated and kept so until the patient is better. An active enema, sinapisms to the extremities and hot foot baths are all to be used promptly. Heatstroke requires altogether different treatment from sunstroke at first. There will be no need for the abstraction of blood, but

rather for the administration of stimulants. Mustard plasters may be applied to the extremities, spine and epigastrium. Cool or iced drinks may be given if the patient complains of heat or thirst. Iced mint juleps are of immediate benefit if prostration is marked, and if it is extreme we must resort to digitalis, brandy, nitrite of amyl, nitro-glycerine and ammonia to keep up the failing heart action. The hypodermic use of nitro-glycerine in severe cases is of great avail. For the speedy reduction of great heat of the body in either form antipyrine, antifebrine and similar agents are much used. Both forms of this trouble are followed by considerable weakness and prostration, and the patient should avoid overwork, mental worry or exposure to the sun for some weeks after an attack.

DELIRIUM TREMENS—Mania a Potu, Alcoholism.

Delirium tremens occurs as a consequence of either the direct action of alcohol for a long period on the brain, or from the sudden withdrawal of alcoholic stimulants in an habitual user of it.

SYMPTOMS.—The prominent symptoms are sleeplessness, tremors, hallucinations or horrors, debility, and loss of appetite and digestive power.

TREATMENT.—The main points in the treatment are to produce sleep, sustain the action of the heart, and substitute good nutritious food for the alcoholic stimulants which have been improperly used. The first important question would be whether to promptly withhold all alcoholic drinks or to gradually withdraw them. We think where it is clear that the system is not depressed and where the pulse is full, with flushed face and heat of head

that we can interdict at once the further use of alcoholics. On the contrary, where the circulation is feeble, and the skin is cool with irregular perspirations and evidences of poor blood supply to the brain, the withdrawal of alcoholic stimulants would be positively dangerous. To produce sleep we may have recourse to opium, hyoscyamus, morphia, chloral, chloroform, antikamnia, neurosine, bromidia and similar agents. The patient will require relatively larger doses of opiates than are usually administered, and for the purpose of securing sleep, we may give a grain of opium every three or four hours, and if sleep should be delayed, we may carry the opium up to a grain every two hours or even more. Where opium is thus demanded we will usually find a need for stimulants of an alcoholic character, and we may give ale, porter or whiskey. The use of infusion of hops, capsicum and agents of this character has been of great service in certain cases of this affection. Capsicum in thirty grain doses has been highly praised. Much good will be derived from the mercurials, especially where there is much cerebral excitement. Digitalis in very large doses is a most excellent remedy where the heart is irregular in its action. It may be given in doses of one drachm to half an ounce. The careful feeding of the patient on nutritious food is of the utmost importance, as we cannot expect to relieve him of the terrible craving for alcohol until we have substituted its place with the proper food products.

CHRONIC ALCOHOLISM -Inebriety.

This condition, induced by the long-continued indulgence in alcoholic liquors, so affects the brain and viscera that the patient has impaired functions of various kinds, such as thickening of the membranes of the brain with hyperplasiae of the connective tissue. There is loss of

memory, and want of self respect and an inordinate craving for alcoholic drinks, which is irresistible and drives the victim to any extremity to procure them. Lungs, heart, liver, spleen and stomach are all more or less affected, sometimes with fatty degeneration or oftener with induration.

TREATMENT.—Much good has been done by treating these intractable cases in the private asylums here and there over our land, and the general practitioner has gained much information of value from these specialists in their successful management of these cases. The value of systematic feeding and of certain therapeutic agents which do undoubtedly relieve the craving for drink and restore tone to the system has been well proven. In all cases where there are no organic diseases of the brain or tubercular trouble and where there is a sincere desire on the part of the inebriate to reform, the practitioner may safely treat the patient at his home with every hope of curing him.

In the first place it will be necessary to get the co-operation of the patient to aid us in effecting a cure. He must be willing to try to break the habit and overcome the appetite while we aid him with remedies. We must make him abstain from the use of alcoholics either by the abrupt cutting off all imbibition or by gradual tapering down. We think that except in very rare cases the immediate cessation of the use of alcohol in every form should be the rule. The next step is to regulate the digestive functions, improve the action of the liver, and feed the patient on the best and most assimilable food obtainable. He should be requested to remain in bed for a few days at first, until his secretions are restored and his appetite and digestion have become in proper shape

to favor an improved nutrition. We think that after all, the chief reliance should be given to the nitrate of strychnia, for it has been pretty well demonstrated both in regular practice and in the hands of successful charlatans that strychnia will certainly abate the craving for drink. We are satisfied that the so-called chloride of gold and sodium is an utterly worthless compound and that its therapeutic value is a myth.

One of the best preparations that we know of for absolutely destroying the appetite for alcohol and at the same time restoring the natural desire for food and aiding in improving digestion is known as Cincho-Lupli. This preparation contains in each ounce 1-32 of a grain of nitrate of strychnia, 2 drachms of Jamaica dogwood, 2 1-2 drachms each of fluid extract red cinchona and humulus, 1-4 drachm each of fluid extract jalap and cannabis Indica, and 5 minims of fluid extract digitalis. This compound is dispensed in our drugstores under the convenient name of cincho-lupli and should be given in doses of a teaspoonful to a dessertspoonful every two to four or five hours and be continued for a good long time, certainly until the patient is fully restored to a fair state of general health and with the desire for alcohol totally abolished. In inveterate cases the hypodermic injection of strychnia nitrate in doses of 1-60th to 1-40th of a grain with 1-200th to 1-100th of a grain of atropia sulph. may be practised twice a day for a while. As soon as the patient improves the atropia must be discontinued, but the strychnia may be used with advantage for many weeks. Many cases will get along very well with the cincho-lupli alone and only occasional ones will require the additional help of the hypodermics of strychnia.

GENERAL DROPSY.

All dropsies, whether local or general, are but symptoms of other disordered conditions. This transudation of the watery portions of the blood into the serous sacs and into the cellular tissues is due to disease of the heart, kidneys, liver, and frequently to impoverished conditions of the blood itself.

TREATMENT.—By diuretics, diaphoretics, and hydrogogue cathartics to reduce the general oedema. The skin and absorbents must be encouraged to take up and carry off the effusion, and squills, the various potass., salts, iaborandi and nitre will be found useful. In anaemia, the iron tonics and generous diet should be given. In dropsies from liver troubles we should relieve that organ of its congestion and favor venous return. The salines and mercurials with counter-irritation are all indicated. Where the heart is at fault, we must try to regulate its action and compensate for its deficiency in disposing of the volume of blood, by using digitalis, strychnia, strophanthus, cocaine and other agents.

HAEMORRHOIDS—Piles.

These are small, indolent or inflamed tumors near or within the anus, and consist of enlarged and knotted veins covered with mucous membrane in various stages of congestion and inflammation. They are generally associated with congestion or torpor of the liver and bowels, and give rise to much pain, burning, and discomfort in defecation, or when they become unusually inflamed. Sometimes considerable haemorrhage takes place from them, and they occasion frequent prolapses of the bowel.

TREATMENT.—Relieve portal engorgement. Hot fo-

mentations or very cold applications, scarifications or leeching are all valuable procedures in this affection. Soothing astringent applications in the form of opium, tannin and glycerine are often needed, and suppositories of tannin and hyoscyamus are much used. Haemorrhoids may be radically treated by injecting the individual tumors with ergot, or carbolic acid, or removed by the ligature, ecraseur or the galvano-cautery.

ENTOZOA - Worms.

SYMPTOMS.--The symptoms of both the common round worm and the tapeworm are obscure and uncertain, though they may vary from slight colic or constipation to the more serious reflexes, such as vertigo, amaurosis, epilepsy, etc. The seat worms are easily recognized by the amount of irritation they set up and by being occasionally discharged in large masses.

TREATMENT.--For the lumbricoid worm calomel, turpentine, pink root, cowhage, chenopodium, powdered tin, and dozens of other remedies are mentioned. A popular form of spigelia is an infusion of half ounce with as much senna to the pint; dose for an adult, a wineglassful every morning before breakfast. The fluid extract of these agents may be given in teaspoonful doses. Santonin is the most reliable remedy of any that we know of in killing and clearing out these offenders. It may be given in doses of one fourth to one-half grain to a child, once or twice a day, either with small doses of calomel and white sugar, or alone and afterwards followed with some cathartic, such as castor oil and turpentine or calomel and soda. An adult may take as much as two or three grains at a dose, though the drug should be administered with care to both adults and children as it pro-

duces serious prostration, vomiting and other nervous symptoms when administered in too large doses.

For tapeform, spts. turpentine in large doses (half ounce) will usually bring away the worm, though this size dose of turpentine will frequently produce intoxication or other unpleasant symptoms of a cerebral character, and this should be borne in mind. Extract of male fern in one or two drachm doses will often act very promptly. A mixture of male fern and kameela or pumpkin seeds largely taken on an empty stomach are quite effective in removing the parasite, as well as the milk from a large cocoanut taken before breakfast.

For thread or seat worms a suppository of santolin and cacao butter will generally answer. Injections of lime water, quassia, or infusions of aloes are all very excellent for removing these little pests.

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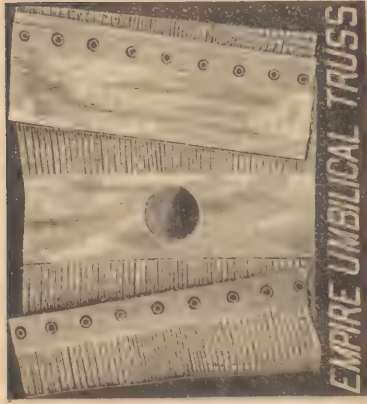
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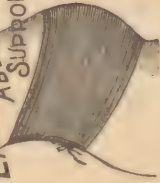


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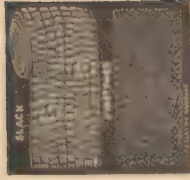
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